Industrial QUALITY CONTROL

Vol. XII, No. 8
FEBRUARY, 1956

Founder of Statistical Quality Control
and
First Officers of ASQC

QUALITY
through
Statistic Methods

1946—TENTH ANNIVERSARY YEAR—1956

Journal of the
AMERICAN SOCIETY FOR QUALITY CONTROL

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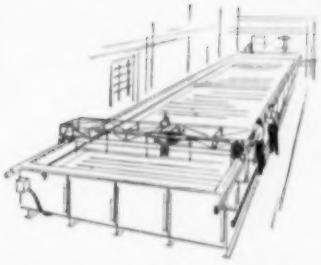

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OUR COVER

In commemoration of the Society's 10th Anniversary, the founder of SQC and the first officers of ASQC are pictured on this month's cover. Top row, left to right: George D. Edwards, president; Walter A. Shewhart; Andrew I. Peterson, vice president. Bottom row, left to right: Ralph E. Wareham, secretary; Martin A. Brumbaugh, chairman, editorial board; Alfred L. Davis, treasurer.

WE HAVE MOVED

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The First Ten Years

Mason E. Wescott

Martin A. Brumbaugh

Preparation of this Anniversary Issue, commemorating the first decade of ASQC as a professional engineering society, has been shared jointly by the undersigned. Although responsibility for planning, assembling, and coordinating the material for this issue rests with us as co-editors, we have had the willing help of many hands cooperating to provide the information pertinent to the occasion. We here acknowledge our gratitude for this assistance, and wish only that space were available to provide credit to each contributor individually.

The founding and growth of ASQC is an exciting story. In putting it before our readers, the problem has not been dearth of material, but rather that of selection. The vital statistics alone suffice to yield an impressive account of the emergence and maturing of ASQC. However, it is the human side of this story that gives these data meaning. We have sought to strike a balance between the facts and the factors that explain them.

It is fitting and timely from the vantage point of the first ten-year milestone to review the progress that has been made and to look ahead with confidence to the opportunities and achievements possible for ASQC in its next ten years. Few professional societies have the broad spectrum of interests that characterizes the membership of ASQC. It is a tribute to the industrial need for such an organization, and to the foresight and leadership of the men who have fashioned ASQC to meet this need, to note the success with which the Society has achieved constancy in the midst of variation. Fusing the diversity of interests typical of the SQC field into a common denominator of scientific service to the quality control function in industrial operations is the real core of the story of ASQC in its first ten years and the cornerstone on which its future growth rests.

We commend your attention to this story, believing that you can take justifiable pride in the progress it bespeaks, and trusting that it will serve to enlist your enthusiasm and support for the very significant potential that lies ahead for your Society.

Martin A. Brumbaugh Mason E. Wescott

. . . . . WALTER ANDREW SHEWHART

The impact of Walter Shewhart on American industry is attested by the honors he has received. The American Society for Quality Control is itself a living monument to his invention of the control chart. ASQC's Shewhart Medal was established in his honor in 1948 when the society was two years old. In 1955, the American Society of Mechanical Engineers awarded him their Holley Medal. The purpose of this medal is to honor a man who "by some great and unique act of genius of an engineering nature has accomplished a great and timely public benefit." In 1954, Rutgers University appointed him its first Honorary Professor of statistical quality control.

His impact on the statistical field is equally significant. In recognition thereof, Dr. Shewhart served two separate terms as President of the Institute of Mathematical Statistics and one as President of the American Statistical Association. In addition, as editor of the Wiley Publications in Statistics, he has contributed in an important way to the phenomenal growth of interest in statistics and statistical applications over the past decade.

While collecting material for this story, my colleague, R. B. Murphy, identified five phases of Shewhart's activity as worthy of consideration. Each is important if we are to have a real picture of the man. At various times, Shewhart, as father of statistical quality control, has been and continues to be:

- a contributor to science and engineering
- an apostle for better quality in American industry
- an advisor to government
- a proponent of international adoption of statistical techniques
- a man who stimulates others to contribute to both the theory and practice of statistical quality control.

Much of this activity has been "behind the scenes." For this reason, some phases of his work are little known.

Most readers of *Industrial Quality Control* are familiar with his two books:

Economic Control of Quality of Manufactured Product, D. Van Nostrand Company, New York, 1931, and

Statistical Method from the Viewpoint of Quality Control, Graduate School, Department of Agriculture, Washington, 1939.

Every reader is familiar with the Shewhart Control Chart, the original of which appeared on the front cover of the January 1950 issue of IQC. A framed photograph of the original documents on quality control was presented to ASQC by Bell Telephone Laboratories in commemoration of the 25th anniversary of their disclosure on May 16, 1924. Many of his contributions have had limited circulation in scientific journals. In addition, some of his work is still unpublished or exists only in memorandum form. One such item discusses the goal of a quality control program. He had observed that President Walter S. Gifford had included the following statement of Bell System policy in the annual report of the American Telephone and Telegraph Company for 1927:

> "Its (A. T. & T. Co.'s) duty is to provide the American public with adequate, dependable and satisfactory telephone service at a reasonable cost."

Shewhart accepted this as a succinct statement of the goal of Bell System quality control. He then proceeded to dramatize this goal as SADE-Q, that is, *S*atisfactory, *A*dequate, *D*ependable and *E*conomic *Q*uality.

While developing the theory of statistical quality control, Shewhart realized the necessity of securing its acceptance by American industry. To that end, he proposed and obtained sponsorship in 1929 for a joint committee for the development of statistical applications in engineering and manufacturing. The original sponsors were: American Society for Testing Materials; American Society of Mechanical Engineers; American Mathematical Society; and American Statistical Association. Later, it was also sponsored by the Institute of Mathematical Statistics. The quiet work of this committee provided the necessary support for successful introduction of statistical control techniques prior to the formation of ASQC.

Beginning in 1936, Shewhart served as a consultant on ammunition specifications for the War Department. As a result, quality control methods were introduced at Picatinny Arsenal and later at Aberdeen Proving Grounds by Leslie E. Simon, now

Major General, U. S. Army, Retired. Shewhart also sparked the preparation of the Z War Standards relating to quality control by the American Standards Association. They were issued in May 1941 and April 1942. In July and September 1942, they were used as part of the basic material for short courses in quality control by Eugene L. Grant of Stanford University. About this time, Shewhart had been appointed to the National Research Council in the Division of Physical Sciences where he became chairman of the Committee on Applied Mathematical Statistics. It was a proposal by the chairman and the secretary, Samuel S. Wilks, of this committee to the newly formed Office of Production Research and Development early in 1943 that led to the series of 8-day courses in statistical quality control based on the Grant model. These were part of the engineering, science and management war training (ESMWT) programs and were initially directed by Holbrook Working and later by Edwin G. Olds. Many of the first ASQC sections owe their existence to these courses.

From the beginning, Shewhart directed attention to international cooperation and quality control as a basis for standards. In this connection, he was invited to give three lectures at the University of London in 1932. Other activity of an international nature included participation in international conferences in 1948 and 1949 and visits to India in 1947-8 and 1954-5. The visit of Paul C. Clifford, Ellis R. Ott and Mason E. Wescott to India in 1952-3 was arranged through Dr. Shewhart. It is worth noting that Shewhart's interest in standards led to his being responsible in Bell Laboratories from 1947-52 for studying means for identifying user preferences that are suitable to include as design objectives in research and development work.

In a broad sense, each member of ASQC has been influenced by Walter Shewhart. Many refer to him, affectionately, as "Uncle Walter," expressing in this way their indebtedness for his interest and encouragement in solving their problems. It is, therefore, not surprising that he has served on advisory committees for Princeton, Harvard and Rutgers' departments concerned with statistical matters. ASQC has benefitted particularly from his serving on its Advisory Committee and from his and Mrs. Shewhart's attendance at its Annual Conventions. Dr. Shewhart has often referred to such implied endorsement by the distaff side as important in the growth of the society. Their continued participation bodes well for the future of ASQC, a society devoted to the use of statistics in engineering and manufacturing as envisioned by Walter Shewhart.

Paul S. Olmstead
Bell Telephone Laboratories
Whippany, New Jersey

• • • • • Highlights in the History of ASQC

Martin A. Brumbaugh, Chairman, Historical Committee

On February 16, 1946 at a meeting held at the Edison Electric Institute in New York City, the American Society for Quality Control was officially launched. Present at that meeting were delegates from two separate underlying societies and others in positions of leadership in the infant quality control movement. The list of those present at the organization meeting appears with photographs on pp. 26-27, hence need not be repeated here. Analysis of this list will show that the organized quality control activity in existence at that time was represented. The underlying Societies were the Society for Quality Control with twelve constituent local societies and The Federated Quality Control Societies with four constituent local societies. These two Societies had been formed during 1945 mainly to demonstrate the need for a quality control society separate from any of the then existing national organizations of engineers, statisticians, or management. That this appraisal of the situation was sound is evidenced by the subsequent growth and strength of ASQC.

Readers of this narrative will quickly sense from the preceding paragraph that considerable maneuvering preceded the February 16, 1946 meeting. Such is indeed the

case, but the story should be unfolded in chronological sequence.

From 1940 to February 16, 1946

At a joint meeting of the American Statistical Association and the Institute of Mathematical Statistics in Chicago in December 1940, Dr. Walter Shewhart suggested to Mr. Edward Schrock and Dr. E. G. Olds that they should take the initiative in calling together a group in the Pittsburgh area for the purpose of forming a quality control society. On April 19, 1941, a meeting, held at Carnegie Institute of Technology, was attended by 24 interested persons who proceeded with the formation of the "Society of Industrial Quality Statisticians." The initial officers were:

Chairman: E. M. Schrock
Secretary-Treasurer: H. J. Hand
Board Member: D. C. G. Cowan
Board Member: J. Manuele

This was a loose organization open to anyone interested, and collected no dues. Obviously, all organizational work was voluntary and all expenses were borne by the individual members or their companies. Nevertheless, the society grew with increasing attendance at several succeeding meetings. On June 19, 1943, the group was more formally organized as the Pittsburgh Chapter of the Institute of Mathematical Statistics with a constitution which carried the following statement of purpose: "Its object shall be to foster the advancement of mathematical statistics and to promote its application to industrial problems."

Due to several circumstances, a major one of which was the press of war work in plants, the Society did not thrive and less than a year later was abandoned.

Dilemma

In the meantime the war had produced a situation which mandated the spread of quality control techniques. When the German tanks moved into Poland in August 1939 it became obvious to military leaders that mechanized warfare had arrived. Immediately the planning had to be shifted and the factory capacity of a nation became the measure of its war potential. This meant redesign of all types of military equipment and procurement on a larger scale than at any time previously. Fortunately more than a year of the drafting board stage ensued before lend-lease was inaugurated and more than two years ensued before Pearl Harbor. When the latter forced quick activation of all plans, a bottleneck quickly arose in the inspection area. The number of trained inspectors was inadequate and the methods of inspection were antiquated. The first step toward solution of this problem was taken late in 1941 when the Ordnance Department requested Bell Telephone Laboratories to loan Mr. George D. Edwards to the Army for the purpose of making a thorough analysis of Ordnance inspection and acceptance procedures. The objective assigned to Mr. Edwards was development of an overall program which would take full advantage of control principles for the improvement of quality, and would at the same time be feasible in terms of the inspection personnel available.

The resulting program involved adoption of acceptance quality control procedures by Ordnance, leaving to industry the development and introduction of corresponding process quality control procedures. With the help of additional Bell Laboratories engineers, Ordnance developed under this program a series of "Army Ordnance Inspection Tables," and it undertook a series of short educational courses throughout the country, which trained between 600 and 700 Ordnance, Signal Corps, and other officers and engineers in the general principles of acceptance quality control and in the specific application and use of the new Inspection Tables.

Installation of this new acceptance quality control system by Ordnance and Signal Corps was highly successful in eliminating inefficient operations and varying standards by Government inspectors, but it produced a somewhat chaotic situation among suppliers. The sampling plans required a specific level of defectives (AQL) for each manufactured item. Many suppliers were unable to meet this requirement and even more frustrating was the fact that they neither understood an AQL requirement nor had personnel capable of translating it into production standards. The result was masses of much needed material piled in warehouses with rejection tags attached.

Remedy

The remedy for this situation soon became apparent. It resided in training within suppliers' plants. Accordingly, a plan was devised and implemented whereby groups of in-plant personnel in industrial areas were brought together for short intensive training courses in quality control point of view and techniques. Two such courses were given on the Pacific Coast late in 1942, and early in 1943 the War Production Board sponsored a broad program of training which was set up in the Office of Production Research and Development. The training took the form of 8-day courses under the management of Dr. Holbrook Working. The story of these courses has been written many times. A total of 34 courses were given in various industrial areas in which approximately 2000 persons received instruction in quality control procedures.

The impact of this activity on the war effort could scarcely be overestimated, but in this chronicle interest centers in the effect upon quality control organization. Hence, the major theme of the WPB-OPRD activity will not be pursued further.

At the close of each 8-day course Dr. Working encouraged the students to plan for future meetings at which members of the class could come together to discuss quality control problems. These meetings were highly successful in at least three directions: (1) group discussion of problems produced ideas that could be tried in plants; (2) men who might never have tried quality control were encouraged to do so through witnessing the progress of fellow students; (3) local quality control societies came into existence in most of the areas in which 8-day courses had been given. All of the societies out of which ASQC was formed were an outgrowth of 8-day courses, except the Rochester Society. No WPB-OPRD course was given in Rochester, but men who had attended courses brought the idea to Rochester where it quickly took root and grew.

Need for National Organization

The natural accompaniment of this welter of local activity was growth of a feeling that organization beyond the area or local level was desirable. Leaders began to talk national organization late in 1943 and into 1944. In conformity with this apparent trend, Dr. Working and Dr. E. G. Olds, who had been a part of the WPB-OPRD program almost from its inception, presented the case for organization of a national quality control society to the Applied Mathematical Statistics Committee of the National Research Council. A subcommittee of this Committee with Dr. Walter Shewhart as chairman,

was appointed to investigate the proposition of forming a national quality control society. This subcommittee reported favorably on February 19, 1945.

Founding of *Industrial Quality Control* Magazine

The activities following circulation of this report cannot be understood without a background of collateral information concerning national organization. As a fruition of decisions made late in 1943, the Buffalo Society of Quality Control Engineers began publication of the bi-monthly magazine, *Industrial Quality Control*, in July 1944. Originally planned as a local organ, the magazine quickly accumulated a mailing list which was national in extent. As original editor and publisher of the magazine, the author of this chronicle is in excellent position to state that the quick national demand for copies of the magazine was less an expression of their inherent usefulness than it was an evidence of the broad need for leadership in bringing quality control men together. Files which have been lost contained a number of letters from various parts of the United States and Canada suggesting that the magazine be used as a medium of communication in the establishment of a national organization. For reasons which will appear in the sequel, this was not done and the magazine continued to be a Buffalo activity, although its precarious existence was more than half underwritten by the unanimous membership support of the Quality Control Engineers of Rochester. When the magazine was one year of age, it had a subscription list of nearly 800, less than 300 of whom were from the Buffalo-Rochester area.

The editorial policy of the magazine was surprisingly well formulated. The emphasis was placed on providing maximum aid to quality control personnel. Early issues of the magazine contained nothing which would have professional interest for a statistician. This policy was in recognition of the fact that embryonic in-plant quality control applications had little of the statistical and mathematical flavor which is quite evident in similar work today. Today's quality control specialist reading the articles in Volume I would have trouble understanding how an explanation of an application of a fraction defective control chart would be worth publishing. Yet that is exactly the information which several hundred people needed in order to give them the knowledge and courage to try the same thing in their plants. Broadly, of course, the objective was the same as it is today—to implant ideas, but the required level of implantation was not the same in 1944-45.

First Attempt at National Organization

Entirely independent of the Buffalo development, but contemporary with it was an attempt at national organization which originated in Detroit. The record is less than clear as to the relation of this attempt to the work of the Applied Mathematics Committee of the National Research Council because Professors Working and Olds, who had made the initial approach to NRC, were present at the initial Detroit meeting on September 13, 1944. Preliminary work in considerable detail for the formation of a national society was done at this meeting and a formal organization meeting was set for October 26, 1944 in Pittsburgh. All of this spade work was directed by Mr. Walter Oliver of the Detroit Society of Quality Control Engineers. The minutes of the second meeting, which was held as scheduled in Pittsburgh with at least 18 quality control men present, show that the stated objective of forming a national quality control society was not accomplished. The chief source of delay appears to have been the fact that no one quite wanted to act without the blessing of the National Research Council. Nevertheless, Walter Oliver, temporary chairman of the Pittsburgh meeting, attempted to forward the objective as indicated in a letter of November 20, 1944, calling for approval of the Pittsburgh actions and reiterating the plan to launch a national society on January 1, 1945.

The immediate reasons for failure of this effort were (1) a letter dated November 24, 1944 from Dean L. P. Eisenhart, chairman of the Applied Mathematical Statistics Committee of the National Research Council, to Walter Oliver which states in part: "Since steps have been taken to organize such a society I am of the opinion that our committee would feel that it is not our function to pass judgment upon the structure which was set up at Pittsburgh, nor to express its approval. In other words, it seems to me that the matter has been entirely taken out of our hands." This letter should have cleared the way for successful organization. It appears to record the withdrawal of the National Research Council from further organizing activity. That the reverse occurred should probably be attributed to (2) a mimeographed "Proposal for organization of a national society for quality control" by Professor Working dated November 26, 1944 which strongly suggests that the Pittsburgh effort be abandoned in favor of a continuation of organization plans through the National Research Council. Dr. Working's primary thesis was that organization through the National Research Council would lead to a better balanced, more soundly managed society than could be obtained by continuing with the Pittsburgh effort.

Subsequent events do not demonstrate the soundness of the Working thesis, but certain it is that his counsel prevailed. The Pittsburgh effort died; the Shewhart subcommittee returned to its deliberations, and, as previously recorded, on February 19, 1945, made a report to Dean Eisenhart recommending that the Committee on Applied Mathematics of the National Research Council lend its assistance in the initial organization of a quality control society. The function of the committee was to be equivalent to the catalytic agent of the chemist. Once the new society was properly launched, the Committee expected to withdraw from further participation in its affairs.

Organizing Committee

On March 9, 1945 the plan for national organization was duly launched by Dean Eisenhart. An organizing committee was set up to collect the ideas of the various local societies and to bring together the leaders of the quality control field. This work progressed steadily during the summer of 1945, but some difficulties were encountered. For reasons that have been stated above, the Detroit Society refused to have any dealings with the organizing committee. The Buffalo Society joined in the organizing effort at a preliminary stage, but subsequently withdrew when events indicated that the organizing committee was underestimating the power of the magazine, *Industrial Quality Control*, as a medium of communication in the work of organization. Perhaps this point deserves to be spelled out in detail. Throughout the period that the Applied Mathematical Statistics Committee was involved in attempts at national organization, the pages of *Industrial Quality Control* were continuously available for

the dissemination of information, but at no time was any request made to use the magazine for this purpose. This is the circumstance which convinced the management of the Buffalo Society that participation in the organizing effort was undesirable. The Rochester Society recognized this situation and, although remaining a part of the organizing effort, gave only nominal support to the work.

Society for Quality Control

Despite the defection of Detroit and Buffalo, the organizing committee brought its work to fruition by setting up an organizing meeting in Pittsburgh on October 3, 1945. At this meeting the Society for Quality Control was launched with the following officers:

President: Edward M. Schrock
Secretary-Treasurer: Ralph E. Wareham

The local societies participating in this society organization were:

Chicago Quality Control Society
Georgia Quality Control Group
Illinois Society for Quality Control
Indiana Society for Statistical Quality Control
State University of Iowa Society for Quality Control
Nebraska Quality Control Group
Newark Society for Statistical Quality Control
Northwestern University Quality Control Group
Ohio Quality Control Society
Philadelphia Quality Control Society
Pittsburgh Quality Control Society
Princeton Quality Control Group
Quality Control Engineers of Rochester

The Federation

In August 1945 the Buffalo society proposed to representatives of the Detroit, Rochester, and Syracuse Societies that the four should combine forces for mutual benefit and to strengthen the program of the magazine, *Industrial Quality Control*. At two meetings held in September and October 1945, this proposal materialized through the formation of the Federated Societies. The organization was purposely loose and did not involve the establishment of a treasury. The principal purpose was to build a center of strength for the protection of the magazine and for community action in a battle of principle which appeared to be forming. The membership of the Federation was considerably smaller than that of the Society for Quality Control, but this disparity was completely offset by the fact that the Federation possessed an accepted medium of communication with the quality control world in the United States, Canada, and abroad.

Although all the elements for a fight were present, no lines of battle were ever drawn because intermediaries began the search for areas of agreement between the two groups as early as November 1945. By January 1946, the work of reconciliation was so far advanced that representatives of the Federation and the Society for Quality Control could sit down in Buffalo to draw up an agenda for a merger. This work bore fruit in the formal meeting at the Edison Electric Institute on February 16, 1946 at which the American Society for Quality Control was formed as described at the beginning of this chronicle.

February 16, 1946

The main business of the meeting was to select officers and adopt a

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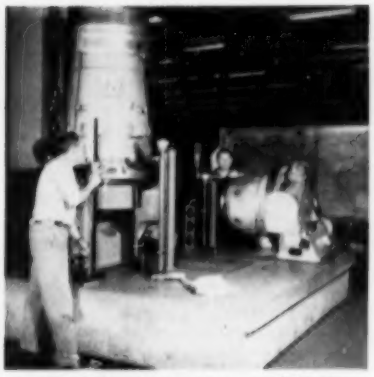

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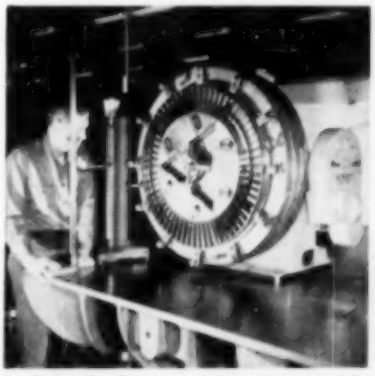

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temporary operating instrument. The following officers were elected:

President: George D. Edwards, Director of Quality Assurance, Bell Telephone Laboratories

Vice President: Andrew I. Peterson, Manager of Quality Control, Radio Corporation of America, Victor Div.

Secretary: Ralph E. Wareham, Manager, New Products Division, National Photocolor Corporation

Treasurer: Alfred L. Davis, Rochester Institute of Technology

The original constitution was prepared by Fred Halton and Norman Berry. It appears, as adopted, in the March 1946 issue of IQC. There have been many operating changes and some added philosophy in the intervening ten years, but the basic philosophy of the original document is still there.

The other formal business of the meeting was the dissolution of the Federation and the Society for Quality Control by their respective representatives, the transfer of the ownership and management of *Industrial Quality Control* to the new Society by the Federation, and the transfer of the treasury balance of the Society for Quality Control to the new Society. More important perhaps than the actions taken was the spirit of unity which characterized the meeting. With few exceptions, the men who formed ASQC have been instrumental in building ASQC. Former lines of division quickly disappeared as the officers of the new Society swung into the details of forming a national organization. The difficulties encountered and the monumental accomplishment can be better understood with knowledge of the setting. The treasury contained less than $500 with no prospect of replenishment for several months. The magazine was a continual drain on what money was in the treasury. All organizational work had to be done at the expense of the companies employing the Officers or at their personal expense. No secretarial assistance could be purchased; all of it came from employing companies. Even the decision to purchase official Society stationary was cause for considerable soul searching. In fact, the organizational work would certainly have been impossible without the financial help of some 275 Founding Members each of whom contributed at least $5.00.

Description of the accomplishments of the Edwards' Administration would require more pages than are available in this issue of IQC. Consequently we have planned at this time to list the major developments and defer to a later time the publication of the detailed historical record. In fact, this plan will be followed for subsequent administrations as well. On pp. 16-21 we present biographies of our eight presidents to date with the principal accomplishments of their administrations. This is inadequate recognition of their leadership, executive capacity, and organizational ability,

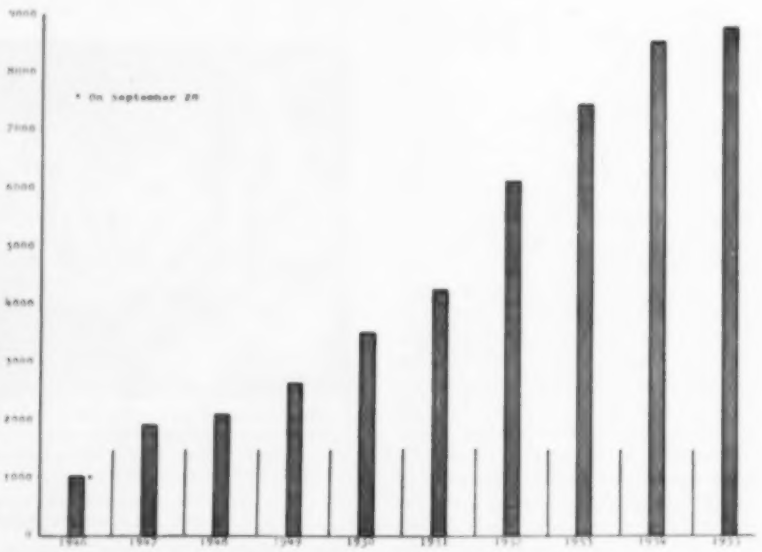


CHART I—Number of Members of ASQC at the Close of Each Fiscal Year Ending June 30, 1946-1955

but it does provide for the membership the cold facts of the Society's ten-year progress.

Membership

Cutting across administrations is the statistical record of the society. Chart I shows that the membership was a meager 1030 in September 1946. This was the earliest date at which a count could be made of the memberships for the fiscal year 1946-47. Through the addition of new sections and the active membership campaign of the managements of the original 16 sections, the membership grew to 1926 by July 1, 1947. This phenomenal accomplishment must be given its proper setting to be understood. At the close of World War II many companies dropped their quality control installations under the mistaken conception that, since the War Production Board had sponsored quality control systems in suppliers plants, their usefulness ended with the termination of wartime contracts. In addition, many companies shifting to civilian type products, although retaining their quality control systems, introduced quality concepts that were, to say the least, discouraging to continued society membership. Predictions were freely made by outsiders and by a small minority of quality control leaders that ASQC would have a short life. This is the background against which the July 1947 membership becomes a phenomenon. It is this 87 percent growth that predicted not only survival but future strength for ASQC. The strength of members is shown by the nearly five fold increase from July 1947 to July 1955. The 8780 members as of July 1955 does not represent maturity by any means because even today the companies using quality control and/or having society members are an extremely small sample of the total concerns that in the future will be using these techniques.

Sections

The breadth of the society's growth is shown in Chart II which presents the number of sections each year. The 16 Founding Societies (February 16, 1946) became 15 sections when the Northwestern University section was merged with the Chicago section. From this nucleus of 15 sections the expansion to 86 sections in July 1955 shows nearly a six fold increase. While a few of the new sections were formed by splitting the membership of existing sections, the principal growth arises from opening new territory. The process of opening new territory will probably continue for several years in both the United States and Canada. The Society also has one section in Mexico and one in Japan. However, the limit of this direction of expansion is not too far distant in the United States. After sections have been formed in most important industrial areas, subsequent growth will come from increase in the size of existing sections.

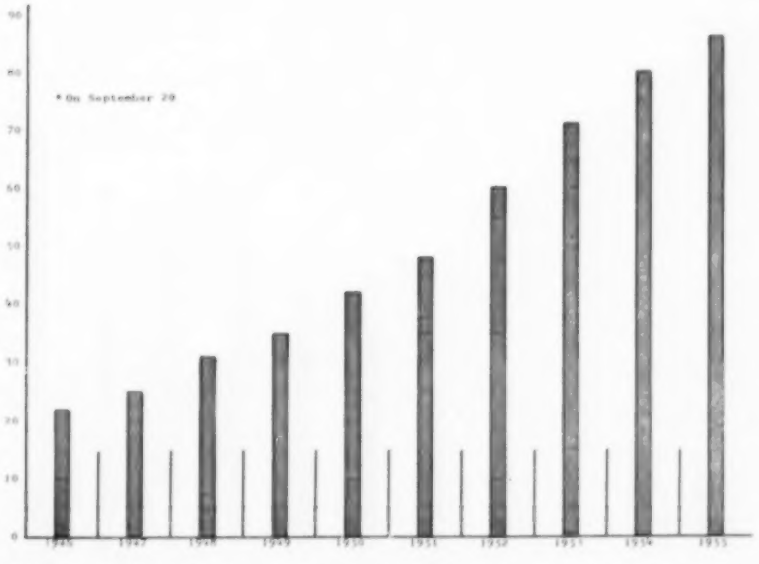
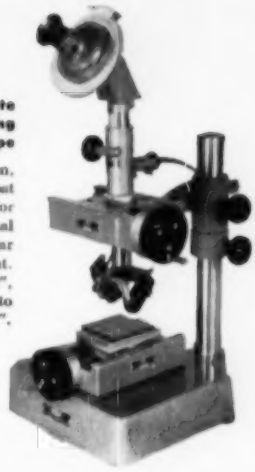


CHART II—Number of Sections in Operation in ASQC at the Close of Each Fiscal Year Ending June 30, 1946-1955



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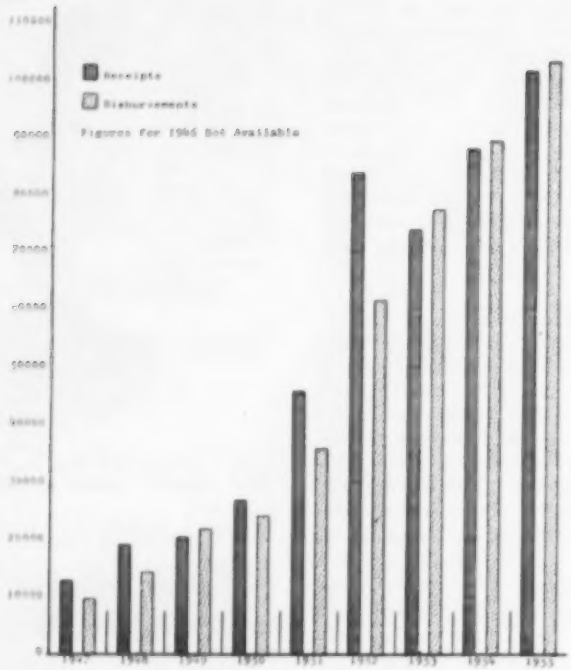


CHART III—Receipts and Disbursements of ASQC for Fiscal Years Ending June 30, 1947-1955

Finance

The financial growth of the Society is shown in Chart III. In each case the length of the bars represents the dollar values for the fiscal year ending June 30. Receipts were $12,798.00 in 1947 and $101,306.00 in 1955, an eight fold increase. The greater increase in income as compared with number of members is attributable to an increase in the cost of membership in 1948 and an increase in advertising revenue in recent years. The financial stability of the Society can be seen by comparing revenue and expenditure. In the early years the major struggle was to maintain solvency. The net cash position of the Society was practically zero at the end of the 1948-49 fiscal year. In the next three years a cash position of $41,000.00 was built up. This improvement came from a combination of careful management of dues income, net revenue from conventions, and expanded advertising income. Beginning with 1952, a new financial factor was introduced when an investment program was begun. Amounts which were transferred from the current account to the investment fund appear on the chart as disbursements. Consequently, what appear to be operating deficits as measured by the length of the bars on the chart are really not such. The best measure of what has happened is the growth of net worth which is tabulated below:

	Net Worth
June 30, 1949	$ 3,798
" " 1950	7,483
" " 1951	34,077
" " 1952	60,965
" " 1953	82,133
" " 1954	89,903
" " 1955	104,126

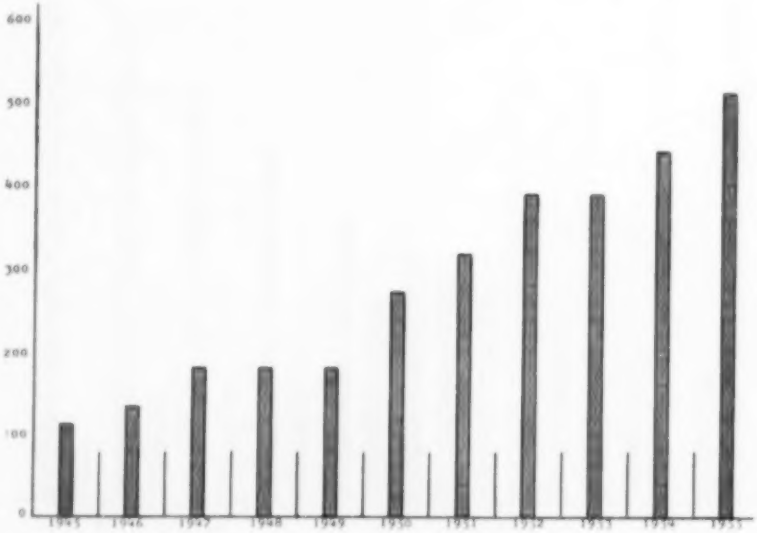


CHART IV—Number of Pages in Each Volume of IQC in 1945-1955

Industrial Quality Control

The number one service to the membership and the chief medium of communication with the membership is the magazine, *Industrial Quality Control*. The story of the magazine in figures is shown in Chart IV. To present the total picture we have included the number of pages per volume from the time the magazine was founded in July 1944. From 112 pages in Volume I, *Industrial Quality Control* has grown to 512 pages. Not all of this is growth in number of pages devoted to technical material because the original magazine contained no advertising whereas the recent years show that more than 20 percent of the pages have been devoted to advertising. The largest yearly increase occurred in Volume VI when the convention issue was inaugurated in support of the Milwaukee Convention.

The most important recent development made by IQC is the change to monthly issues beginning in January 1955. While this change will increase the number of pages per volume somewhat, the real importance of the change lies in the increased opportunity for communication with the membership.

News Supplement

The other important regular medium of communication has been the News Supplement. Started in 1947 and edited by Ernest H. Robinson of Johnson and Johnson, Chicago, the News Supplement has served as a clearing house for news

of section activity and news concerning individuals. The tabulated schedule of section events contained in each issue has been and is a record of the technical activity of the Society at the section level. Program chairmen of the sections have made constant use of this record in planning future programs. Since November 1953 the News Supplement has been incorporated in IQC as a regular department.

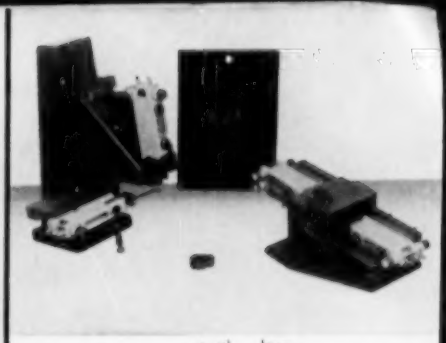
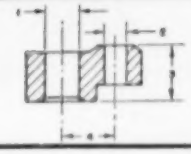
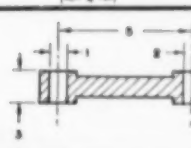
Editorial Board Rotation

One circumstance relating to IQC requires separate presentation. In 1946 the Editorial Board of the magazine was composed of thirteen members. This group continued to carry the burden of evaluating submitted manuscripts until June 1950 when the Board was increased to 15 members. Beginning in 1951 a rotation plan was inaugurated whereby three members are replaced each year. The last three of the original Board retired in June 1955, so that the 15 member Board is now on a five-year rotation plan. This plan has the advantage of bringing more members into direct contact with the technical side of magazine editing. Likewise new points of view are brought to this phase of producing the magazine. The obvious disadvantage of the plan is the annual loss of experience and long continued association, but this basically irreparable loss has been partially mitigated by maintaining retiring members of the Board on a standby basis for advice and limited assistance in difficult circumstances.

Conventions

Annual conventions have been held by the Society since 1947. The first Convention was held in conjunction with the Second Midwest Quality Control Conference in Chicago in June 1947. The second Convention was combined with the Fourth Annual Quality Control Clinic of the Rochester Society in February 1948. The third Convention was combined with the Third Annual New England Quality Control Conference at Boston in May 1949. The fourth Convention was combined with the Fifth Midwest Quality Control Conference in Milwaukee in June 1950.

Beginning with 1951 the Society's National Convention has been conducted as a separate event with one section acting as host and with the members of the host section responsible for planning and execution of all Convention activities with the general guidance of the Society's


SEWING MACHINE PART

SMALL CONNECTING ROD


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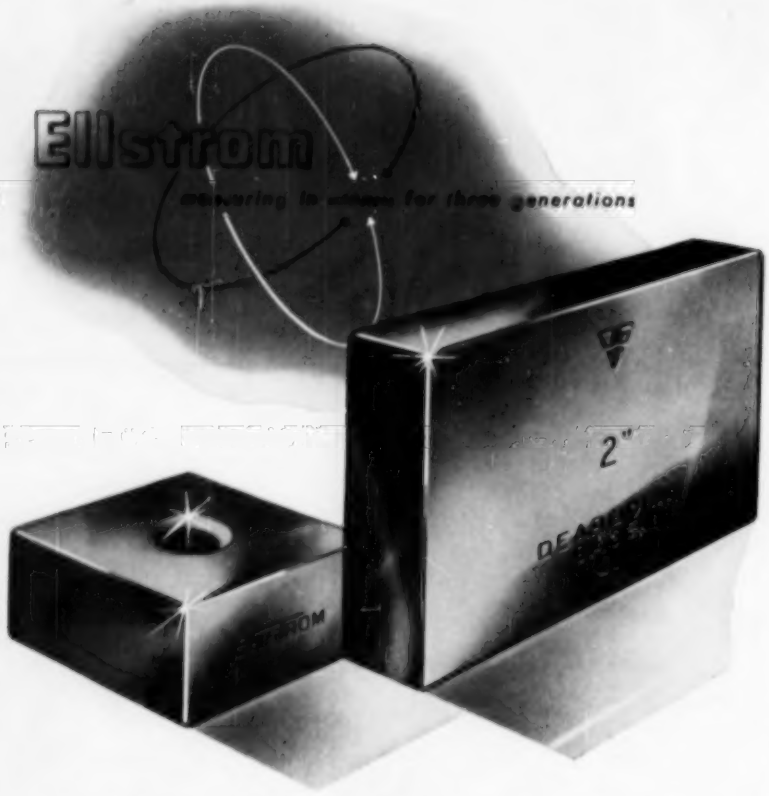

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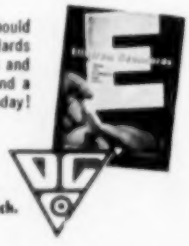

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General Convention Committee. The dates and hosts sections have been:

Date	Host Section
1951	Cleveland
1952	Syracuse
1953	Philadelphia
1954	St. Louis
1955	Metropolitan

The success of National Conventions can be measured in several ways. Table I contains important measures of Convention growth. The attendance reached a peak in Philadelphia, declined in St. Louis, but rose again in New York. The exhibition was considerably smaller in New York. The technical program has expanded steadily from year to year. Likewise the number of ladies in the ladies program has more than doubled since 1951. The growth in the technical program is the sensitive indicator of the diversification of quality control interest. Specifically the attendance in 1955 was only 18 percent greater than in 1951, but the number of program hours was 58 percent greater. To some degree this can be explained by the fact that the Cleveland auditorium has a limited number of meeting rooms with fairly large seating capacity, whereas the New York hotels have a large number of meeting rooms with smaller seating capacity. Beyond this situation is the fact that more groups within the Society are developing specialized interests which require program servicing. The biggest single factor in the case is the growth of the Textile, Electronic, Chemical, Automotive, Metals, and Administrative Applications Divisions which will be discussed in the next part of this report.

The mark of an ASQC Convention is the impression gained by local people who must deal with those in attendance. Uniformly the report from each of the five cities involved is that this is one of the most serious-minded groups that can be assembled. This means that the planning and operation of a convention is important business for the future of the Society. Responsibility for overall planning and continuity rests with the General Convention Committee of the Society. Execution of the plan and operating details are the joint responsibility of the General Convention Committee and the Host Convention Committee. The future success of this dual responsibility concept rests in the ability of the Society Committee, with its accumulated experience, to maintain flexibility in its attitude toward the

TABLE I—Five Years of National Convention Data

	1951	1952	1953	1954	1955
Total registered attendance	2,093	1,901	2,612	1,412	2,264
Exhibitors	36	36	43	44	26
Booths	54	55	72	64	38
Speakers in Technical Program	52	61	78	76	107
Moderators	18	21	34	46	35
Program Hours in Technical Program	57	67	74	78	90
Ladies in Ladies Program	68	84	120	116	175

successive host committees who always will be amateurs in the convention business.

Divisions

The Board of Directors of ASQC has recognized for several years that whole segments of the membership were less interested in the general subject, quality control, than in the use of quality control in a particular industrial application. This tendency began to manifest itself in sectional meetings when representatives of the chemical industry failed to attend meetings where problems of the mechanical industries were being presented and vice versa. A parallel statement could be made for other areas of specific interest. A similar channelization of interest appeared at numerous regional conferences.

As a means of servicing this tendency the Board in 1949 authorized the establishment of Technical Committees. The first of these was the Chemical Technical Committee; the second was the Electronics Technical Committee, the third was the Automotive Technical Committee, the fourth was the Aircraft Technical Committee, the fifth was the Textile Technical Committee.

In May 1952 the Executive Committee of ASQC officially recognized the necessity for more permanent organization by industrial fields when it authorized the formation of Divisions within the Society. The first action under this authorization was the replacement of the Textile Technical Committee by the Textile Division. This first Division quickly acquired a companion when the Chemical Technical Committee was replaced by the Chemical Division.

Simultaneously the Metals Technical Committee was formed to service members in the ferrous and non-ferrous fields. In June 1954 the Brewing Industry Technical Committee and the Administrative Applications Technical Committee were formed.

In 1955 four Technical Committees achieved divisional status. The new Divisions are Administrative Applications, Aircraft, Automotive, and Electronics.

The programs of all of the Divisions and Technical Committees are designed to provide service to members in the specific fields involved. These programs have varied from one division to another. In some cases special publications have been made. In others, articles in IQC have been encouraged. In all cases, special media of communication have been set up within the Division.

From a broad point of view there might be cause for lament in the formation of these Divisions which unquestionably do separate the members into groups on the basis of community of interest. After the passing of several years it is easily conceivable that in many cases a member's total loyalty will be to his division and only collaterally to the overall unit, ASQC. By many, like the present author, who were present at the birth of ASQC ten years ago, the concept of the parent society as a holding company for operating divisions is not accepted without some tendency to look back to the "good old days." However, progress is not achieved by looking backward. The quality control idea has spread into so many types of industry and into so many parts of an industrial operation that quality control men in a single plant are having some difficulty maintaining a community of interest. Between plants this division of interest is greatly magnified, and with increasing area comes increasing division until at the apex is the divisional organization within ASQC.

Truly the expression, quality control—or for that matter the expression, statistical quality control—includes so much today that some descriptive appendage is necessary to give usable meaning to words which without modification made sense to only a double handful of people ten years ago.

. . . . . Necrology: 1946-1955

The least palatable part of a historical review is the sad necessity of recording the passing of colleagues. Our membership is younger on the average than would be the case in an older society; therefore, the force of natural mortality does not produce a lengthy list. While this is a fortunate circumstance, it does not in any way reduce the pain of having to commemorate the passing of those whom we would so much rather have among us.

The list has been arranged according to years and sections. The infor-

Year	Name	Section or Affiliation
1949	Thomas P. Wallace, Jr.	Huntsville
	George H. Johnson	Muncie
	Sherman S. Graves	Wichita
1950	Harry M. Scott	Kansas
	Howard J. Hand	Pittsburgh
	L. Clyde Sheehan	Georgia
1951	E. E. Rippey	Wichita
1953	Hugh M. Smallwood	Metropolitan
1954	Harry B. Marsh	Indiana
	Raymond S. Saddoris	Milwaukee
	Henry J. Schwarz, Jr.	Cincinnati

1955	William S. Hansen	Milwaukee
	Ernest L. Fay	State University of Iowa
	Arthur Grundmann	Delaware
	A. L. Pond	Seattle
	Charles Deere Wiman	Member of Advisory Committee
	Douglass Potter	Metropolitan
	John Collopy	Milwaukee

mation has been taken from IQC and the News Supplement; hence, delayed reporting may cause an incorrect date. Likewise, the list is undoubtedly incomplete, but the alternative was a piece of detective work which would have required the cooperation of some 90 section secretaries without too much expectation of expanding the list.

When letterpress printing was first used in the production of IQC in 1945, and throughout the subsequent years to 1950, during which the magazine was produced by Foster and Stewart in Buffalo, the difference between success and failure for your first editor and subsequently for your present editor rested squarely on the shoulders of James Foster. Both of us lost a friend in his death on January 30, 1955, and we are proud to record our joint indebtedness to him. Although he was not a dues paying member, he nurtured IQC when it was an infant and never wavered in either his faith in ASQC or his support of two fledgling editors.

. . . . . Biographies of ASQC Presidents

The historical record which is presented on pp. 6-16 of this issue of IQC shows the growth of the society during the past ten years. It is a record of solid accomplishment which has few parallels among technical associations. At the same time the current status is a sound base on which to build a future which can be equally spectacular.

Quality control people are busy people who have little alternative except to accept the benefits of the society without too much question concerning the origin. However, these things did not just happen; they were planned and put into operation by the officers, executive committee, and board of directors as financial position permitted. Over the years one man, the president of the society, has been in the pivot position. His has been the ultimate responsibility for decisions; to him goes the credit for accomplishments. Their faces are familiar to all, but all will welcome more information concerning them and their work. The sketches which follow do scant justice to the subject at hand, but will perhaps suffice until the historical committee has been able to prepare a more complete story.

GEORGE DeFOREST EDWARDS, 1946-1948

Date of Birth **November 23, 1890**

Company Affiliation

While President: Bell Telephone Laboratories, Inc., New York, New York.

Present: Retired, but acting as a professional consultant on occasion on a part-time basis

Job Title

While President: Director of Quality Assurance
Present: Consultant

Principal ASQC Events During Presidency

Organization of society
Incorporation of society
First annual convention
Adoption of the constitution under which the society became a full-fledged professional engineering organization
Adoption of the code of ethics
Adoption of society insignia
Proposal of the Shewhart Medal
Establishment of the Brumbaugh Award

Standing and Special Committee Work in ASQC

Chairman, Committee on Constitution and By-laws (present)
Member, Section Representation Committee
Member, Historical Committee (present)

Principal Contributions to Growth of Quality Control

Conception and reduction to use of the fundamental idea of acceptance quality control, under which the character and quantity of subsequent acceptance inspection and the severity of the corresponding acceptance criteria are varied in inverse proportion to the quality as indicated by the results of the preceding inspections

Conception and reduction to use of the fundamental idea of purchaser quality assurance under which the purchaser carries on continuously a program of inter-

related quality investigations, the aggregate results of which provide an adequate degree of assurance that he is receiving material of the quality he intended to buy

Organization, development and general supervision of the overall quality assurance program of the Bell Telephone System from its inception for a period of over 30 years

General oversight of the development and introduction of acceptance quality control with the necessary sampling inspection tables, into Army Ordnance and the Army Signal Corps procurement during World War II

Took an active part in the founding, organization, and early development of the American Society for Quality Control

General oversight of the development and introduction of production quality control into Army Ordnance procurement of heavy calibre ammunition

General oversight of the development and placing in operation of the overall quality assurance program covering Army Ordnance procurement of a type of guided missle

Development of general plan for the overall quality assurance program covering U. S. Atomic Energy Commission procurement of nuclear weapons.

Publications

Miscellaneous magazine articles on quality control and quality engineering subjects

Society Affiliations

Fellow, American Society for Quality Control
Fellow, American Institute of Electrical Engineers
Member, Harvard Engineering Society
Member, The Pilgrims of the United States
Member, St. George's Society of New York
Member, Harvard Club of New York
Member, The Church Club of New York

Educational Background

AB (magna cum laude in mathematics,) Harvard College

Honors and Positions of Distinction

Army Ordnance Department, Citation for Distinguished Service, 1944

War Department, Certificate of Appreciation for Patriotic Service, 1947

American Society for Quality Control, Honorary Member, 1949; Shewhart Medalist, 1951

RALPH EDWARD WAREHAM, 1948-1950

Date of Birth March 24, 1914

Company Affiliation

While President: National Photocolor Corporation, New York

Present: Ralph E. Wareham and Associates, Chappaqua, New York

Member, Engineering Faculty of Columbia University, 1947 to present

Job Title

While President: Vice President
Present: Consultant on Quality Control

Principal ASQC Events During Presidency

Technical committee program established
Society membership badges designed and procured
First Shewhart Medal awarded
First Brumbaugh Award presented

Other Offices in ASQC

First Executive Secretary, 1946-1948

Standing and Special Committee Work in ASQC

Member, Standards Committee (present)
Chairman, Awards Committee (present)

Principal Contributions to Growth of Quality Control

Member, American Standards Committee on Quality Control (1940 to present)

Member, National Defense Research Council Committee on Quality Control Organization (1943-1946)

Publications

Co-author, American War Standards on Quality Control, 1941-1942

Author, Army Ordnance Handbook on Statistical Quality Control and Acceptance Sampling, M608-9, 1952

Society Affiliations

Fellow, American Society for Quality Control
Member, Institute of Mathematical Statistics

Educational Background

BA, University of Iowa, 1935

Government Work

War Production Board (OPM), Technical Consultant, 1941

Army Signal Corps, Technical Consultant, 1943-1944

Honors and Positions of Distinction

Phi Beta Kappa, University of Iowa, 1935

WADE RICHARDS WEAVER, 1950-1952

Date of Birth June 19, 1901

Company Affiliation

While President: Republic Steel Corporation, Cleveland, Ohio

Present: Same

Job Title

While President: Director of Quality Control
Present: Same

Principal ASQC Events During Presidency

Establishment of national convention policy
Effecting constitutional reforms re: territory division, election of directors, administrative set-ups, etc.
Setting up publications office with paid managing editor
Establishment of securities investment program
Fiscal strength and development policy formulation

Other Offices in ASQC

Chairman, Ohio section
Regional Director
Vice President, 1948-1950

Standing and Special Committee Work in ASQC

Chairman, National Convention for 1951
Chairman, Section Representation Committee
Chairman, Financial Advisory Committee (present)
Chairman, General Convention Committee (present)
Member, Publication Management Advisory Committee (present)
Member, Advisory Council, Metals Technical Committee (present)
Member, Operations Research Committee (present)

Principal Contributions to Growth of Quality Control

Pioneer in applications to the steel industry
Extensive lecturing and authoring
Extended activity in ASQC development
Extended activity in national convention development and execution
Sponsored collaboration with National Screw Machine Products Association to prepare and publish a series of four manuals on elementary quality control and exposition of Mil-Std.-105A, and participated actively in this development

Publications

Contributed article in *Industrial Quality Control* plus numerous other trade and technical publications

Society Affiliations

Fellow, American Society for Quality Control
Member, Operations Research Society of America
Member, American Society for Metals

Educational Background

BS, Yale University, 1923

Honors and Positions of Distinction

Vice-chairman, Committee on Product Standards of the American Iron and Steel Institute
Member, Cleveland Port and Harbor Commission

SIMON COLLIER, 1952-1953

Date of Birth June 1, 1894

Company Affiliation

While President: Johns-Manville Corporation, New York, New York

Present: Same

Job Title

While President: Director of Quality Control
Present: Same

Principal ASQC Events During Presidency

Establishment of the regional conferences committee
Formation of Textile and Chemical Divisions of ASQC
Extensive program of addressing sections
Extensive program of addressing other technical societies, industrial, and university groups

Other Offices in ASQC

Executive Secretary, 1948-1951
Vice President, 1951-1952

Standing and Special Committee Work in ASQC

Member, Committee on Professional Ethics and Classifications (present)
Member, Section Affairs Committee (present)

Principal Contributions to Growth of Quality Control

Johns-Manville film on quality control presented to over 50,000 people with an average group of 100. This included a large number of ASQC sections, other technical societies, industrial, and university groups

Publications

Methods of Analysis of Rubber Goods, National Bureau of Standards

Society Affiliations

Fellow, American Society for Quality Control
Former Chairman, New York Rubber Group, American Chemical Society
Member, Board of Directors, Rubber Division, American Chemical Society
Chairman, Committee D-11, American Society for Testing Materials on Rubber and Rubber-Like Materials

Educational Background

BS (Chemistry), Worcester Polytechnic Institute, 1916

Government Work

Rubber Chemist, National Bureau of Standards, 1917-1918
Assistant Chemist in charge of rubber work, National Bureau of Standards, 1919-1923

Honors and Positions of Distinction

Member, Board of Directors, American Society for Testing Materials, 1948-1951

ALFRED L. DAVIS, 1953-1954

Date of Birth March 9, 1916

Company Affiliation

While President: Rochester Institute of Technology, Rochester, New York
Present: Same

Job Title

While President: Director, Public Relations
Present: Same

Principal ASQC Events During Presidency

Establishment of Presidential Award for Section Management (renamed Saddoris Award for Section Management)

Other Offices in ASQC

President, Rochester Society for Quality Control, 1944-1946
Treasurer, 1946-1951
Executive Secretary, 1951-1952

Standing and Special Committee Work in ASQC

Co-chairman, Annual Convention, 1948
Member, Shewhart Medal Committee
Member, Education Committee
Member, General Convention Committee
Member, Nominating Committee
Member, Office Procedures Committee
Member, Awards Committee (present)
Member, IQC Business Advisory Committee (present)
Member, Historical Committee (present)

Principal Contributions to Growth of Quality Control

Organization of special intensive program, "Quality Control for the Chemical Industries," offered at Rochester Institute of Technology for the past ten years
As Chief Inspector, Instrument Division, at Bausch and Lomb Optical Company, introduced quality control techniques in plant during World War II

Society Affiliations

Fellow, American Society for Quality Control
American College Public Relations Association
Public Relations Society of America
Member, Board of Directors, Rochester Section, Public Relations Society of America
Member, Rochester Chamber of Commerce
Member, Rochester Rotary Club
Member, Advertising Council of Rochester

Educational Background

AB, Salem College, 1937
MA, Syracuse University, 1938

Honors and Positions of Distinction

Member, Committee of Management, Rochester YMCA
Member, Board of Directors, Visiting Nurse Service of Rochester
Member, Board of Directors and Executive Committee, Hillside Children's Center
Member, Board of Directors, Salem College

RAYMOND SCOTT SADDORIS, 1954 NOVEMBER 13, 1954

Date of Birth December 2, 1898

Company Affiliation

While President: A. O. Smith Corporation, Milwaukee, Wisconsin
Present: Deceased

Job Title

While President: Director of Quality
Present: Deceased

Principal ASQC Events During Presidency

Arrangements made for putting IQC on a monthly basis beginning with January 1955 issue
Experienced sales representatives were retained to procure additional advertising for the magazine
Advertising rates were increased effective October 1, 1954 to bring them more in line with other technical publications
Office Procedures Committee established—first major action was recommendation for office consolidation in Milwaukee

Other Offices in ASQC

Vice President, 1952-1954
Midwest Regional Director, 1950-1952
Chairman and National Director, Milwaukee Section, 1948-1950

Standing and Special Committee Work in ASQC

Business Manager, *Industrial Quality Control*
Chairman, Advertising Committee
Chairman, National Convention, 1950

Principal Contributions to Growth of ASQC

Built advertising program of ASQC
Planned and executed move of publications office to Milwaukee
Pioneered innovations in 1950 National Convention which have become standard in subsequent conventions
Pioneered the May convention issue of IQC
Major force in establishment of Midwest Conference Board

Publications

"A Better Way," *Industrial Quality Control*, January, 1955
"The Quality Audit of Assembly Operations," *Proceedings of the Seventh Michigan Forum*, 1952
"Cutting the Odds on Rejects," *Systems*, 1951
"Developing Charts for Quality Control Work," *SAE Journal*, 1950

Society Affiliations

Fellow, American Society for Quality Control
Member, Society of Automotive Engineers

Educational Background

Milwaukee School of Engineering, 1920-1921

Military Service

U. S. Navy, 1916-1917

Honors and Positions of Distinction

Presidential Award for Section Management was renamed the Saddoris Award in January, 1955

PAUL ALFRED ROBERT, NOVEMBER 1954-1955

Date of Birth April 7, 1910

Company Affiliation

While President: IBM Corporation, Endicott, New York
Present: The Gruen Watch Company, Cincinnati, Ohio

Job Title

While President: Project Engineer, Product Cost Engineering
Present: Director of Quality Control

Principal ASQC Events During Presidency

Administrative Applications, Aircraft, Automotive, and Electronics Divisions established
IQC published on a monthly basis
Presidential Award for Section Management renamed Saddoris Award

Other Offices in ASQC

Treasurer, 1952-1953
Vice President, 1953-1954
First Chairman, Binghamton Section, 1946

Standing and Special Committee Work in ASQC

Chairman, Program and Speakers Committee
Chairman, Awards Committee
Member, Nominating Committee
Member, Shewhart Medal Committee
Member, Auditing Committee
Member, Administrative Applications Committee

Principal Contributions to Growth of Quality Control

Installed statistical quality control in IBM plants at Endicott and Poughkeepsie
Promoted application of punched card accounting machines to quality control
Taught courses in statistical quality control in IBM at Binghamton and Endicott schools

Publications

"Quality Control of Complex Assemblies," (To be published in IQC)
"What ASQC Has Done for Quality Control," *Industrial Quality Control*, August 1955

Society Affiliations

Fellow, American Society for Quality Control
Member, American Institute of Electrical Engineers

Educational Background

BS, Electrical Engineering, Massachusetts Institute of Technology, 1932

Military Service

Assistant Chief, Inspection Division and Quality Control Officer, Rochester Ordnance District, 1942-1946

ARTHUR BENDER, JR., 1955-

Date of Birth May 11, 1912

Company Affiliation

Delco-Remy Division, General Motors Corporation, Anderson, Indiana

Job Title Quality Engineer

Principal ASQC Events During Presidency

Arrangements made to consolidate all ASQC offices in Milwaukee
Use of tabulating equipment to maintain membership lists planned
Provision made for hiring of full time paid administrator in new consolidated office set-up

(NOTE: This record is necessarily incomplete)

Other Offices in ASQC

Vice President, 1952-1953
Vice President, 1954-1955
Regional Director, 1947-1949
President, Indiana Section, 1946-1947
Vice President, Indiana Section, 1945-1946

Standing and Special Committee Work in ASQC

Member, Shewhart Medal Committee
Member, Examining Committee
Member, Section Representation Committee
First, Second, and Third Midwest Conference Planning Committees

Member, First National ASQC Convention Planning Committee
Member, Saddoris Award Committee

Principal Contributions to Growth of Quality Control

Control Limit Calculator
SQC-Lator
Adaptation of Probability Paper to automatically develop distribution curve
Talks to many Sections, and other organizations, mainly on simplified quality control approach
Training programs, Cleveland and Syracuse Conventions, and many regional conferences

Society Affiliations

Fellow, American Society for Quality Control
Member, Society for Automotive Engineers

Educational Background

BSEE, Purdue University

. . . . . Officers and Executive Committee Roster American Society for Quality Control 1946-1955

The tabulation presented here exhibits in one place at one time the chronological record of the persons in whose hands the management of ASQC as a Society has rested during the ten year period 1946-1955. To these people and their employers, the Society owes profound gratitude for the time and energy and loyalty with whom they have labored during the critical formative years of the Society's growth.

Office	1946-47	1947-48	1948-49	1949-50	1950-51	1951-52
President	George D. Edwards	George D. Edwards	Ralph E. Wareham	Ralph E. Wareham	Wade R. Weaver	Wade R. Weaver
Vice President	Andrew I. Peterson	Frederick J. Halton, Jr.	Wade R. Weaver	Wade R. Weaver	Martin A. Brumbaugh	Simon Collier
Executive Secretary	Ralph E. Wareham	Ralph E. Wareham	Simon Collier	Simon Collier	Simon Collier	Alfred L. Davis
Treasurer	Alfred L. Davis	Alfred L. Davis	Alfred L. Davis	Alfred L. Davis	Alfred L. Davis	Paul A. Robert
Chairman-Editorial Bd.	Martin A. Brumbaugh	Mason E. Wescott	Mason E. Wescott	Mason E. Wescott	Mason E. Wescott	Mason E. Wescott
Regional Directors						
New England	Charles J. Hudson	Elwood E. Folsom, Jr.	Elwood E. Folsom, Jr.	Dorian Shainin	Dorian Shainin	Dorian Shainin
Middle Atlantic	Paul S. Olmstead	Irwin S. Hofler	Irwin S. Hofler	Besse B. Day	Besse B. Day	Besse B. Day
Central	Wade R. Weaver	Wade R. Weaver	Ralph A. Hefner	Ralph A. Hefner	Edward H. Schrock	Max Astrachan
Northern	Alfred J. Winterhalter	Alfred J. Winterhalter	Martin A. Brumbaugh	O. Herbert Somers	O. Herbert Somers	I. Glenn Stevenson
Mid-West	Frederick J. Halton, Jr.	Arthur Bender, Jr.	Arthur Bender, Jr.	Frederick J. Halton, Jr.	Raymond S. Saddoris	Raymond S. Saddoris
Western	John M. Howell	Wyatt H. Lewis	Wyatt H. Lewis	Wyatt H. Lewis	Wyatt H. Lewis	Dorothy L. Biggs

Office	1952-53	1953-54*	1954-55		1955-56
President	Simon Collier	Alfred L. Davis	Raymond S. Saddoris	Paul A. Robert	Arthur Bender, Jr.
Vice President	Arthur Bender, Jr.	Paul A. Robert	Arthur Bender, Jr.	Arthur Bender, Jr.	Leon Bass
	Raymond S. Saddoris	Raymond S. Saddoris	Paul A. Robert	Dorian Shainin	Dale L. Lobsinger
	Julian H. Toulouse	Julian H. Toulouse	Julian H. Toulouse	Julian H. Toulouse	Dorian Shainin
					Julian H. Toulouse
Executive Secretary	Edward B. Haden	Dorian Shainin	Dorian Shainin	Cameron E. Fisher	Cameron E. Fisher
Treasurer	Paul A. Robert	Leon Bass	Leon Bass		Ervin E. Schiesel
Chairman-Editorial Bd.	Mason E. Wescott	Mason E. Wescott	Mason E. Wescott		Mason E. Wescott
Regional Directors					
New England	Ervin E. Schiesel	Max Astrachan	Clarence R. Burdick		Clarence R. Burdick
Middle Atlantic	Besse B. Day	Henry J. Becker	Paul K. Leatherman		William P. Goepfert
Central	Max Astrachan	Edwin C. Harrington, Jr.	Dale L. Lobsinger		Paul K. Leatherman
Northern	Leon Bass	Dale L. Lobsinger	Warren R. Purcell		J. Y. McClure
Mid-West	Henry J. Becker	Ervin E. Schiesel	Ervin E. Schiesel		Warren R. Purcell
Western	Dorothy L. Biggs				

*Beginning in 1953-54 the title and position of "Regional Director" was dropped. Instead the Board of Directors now elects five of its members as "Executive Directors" to serve on the executive committee.

. . . . . Fellow and Honorary Membership, ASQC

Appointments to Examining Committee

Year Appointed	Name	Term Ending
1947	W. A. Shewhart	1949
1947	P. S. Olmstead, Chairman 1947-50	1950
1947	M. A. Brumbaugh	1951
1947	C. J. Hudson	1952
1947	L. A. Knowler, Chairman 1950-53	1953
1949	E. G. Olds	1954
1950	W. H. Lewis	1955
1951	R. S. Inglis	1956
1952	P. S. Olmstead, Chairman 1953-date	1957
1953	A. Bender, Jr., (to 1955)	1958
1955	M. A. Brumbaugh (from 1955)	
1954	C. C. Craig	1959
1955	H. G. Romig	1960

The American Society for Quality Control, as a professional engineering society, provides four grades of membership, viz: Members, Senior Members, Fellows and Honorary Members. Article II of the Constitution clearly and specifically spells out the requirements that must be met for each of these four grades. Article V further specifies that admission to the Society, except as an Honorary Member, shall be only in the grade of Member. However, any Member, Senior Member, or Fellow may apply to the Executive Secretary for transfer to any grade of membership other than Honorary, and all such applications for transfer shall be acted upon by the Examining Committee. Honorary Members must be proposed in writing by at least ten Members, Senior Members, or Fellows, and may be elected to this grade only by unanimous vote of the Board of Directors.

Specifically, the Constitution states that "An Honorary Member shall be one who has rendered acknowledged eminent service to quality control."

Requirements for the Fellow grade specify that an applicant shall be at least 33 years of age; shall be a quality control or inspection engineer, or the equivalent thereof, by profession; shall be qualified to plan and take full and responsible charge of important quality control work; and shall have been in the active practice of his profession for at least ten years, with full and responsible charge of important quality control work for at least three years.

Academic personnel who are at least 33 years of age, who have attained special distinction as expounders of the principles of quality control or closely allied statistical or inspection subjects, and who have had at least ten years experience in teaching in these areas with full and responsible charge for at least three years in a course involving quality control in a principal college or engineering school, are also specified as eligible to apply for transfer to the Fellow grade.

Finally, a person who is at least 33 years of age and who has done notable original quality control work of a character to give him recognized standing equivalent to that required for Fellows as specified above, is eligible to apply for transfer to the Fellow grade.

Thus it is seen that the fellow grade, although not an honorary grade, is a membership grade which it is an honor to attain, requiring, as it does, maturity, experience, and demonstrated leadership of a professional character in the field of statistical quality control.

During its first ten years, the Society has recognized and elected only two Honorary Members, viz: Walter A. Shewhart and George D. Edwards.

A further indication of the professional growth of ASQC may be observed in the following figures which show the actual number of transfers to the Fellow grade each year and the proportion of the respective total annual membership thus transferred.

FELLOWS of ASQC

As of	Cumulated Elections	Cumulated Losses			Net	ASQC Members	% F/M
		Death	Resignation	Dropped			
June 30, 1947	0	0	0	0	0	1926	..
1948	43	0	0	0	43	2102	2.0
1949	81	0	0	0	81	2638	3.1
1950	124	0	0	0	124	3510	3.5
1951	131	0	0	1	130	4245	3.1
1952	148	0	0	3	145	6109	2.4
1953	171	1	3	4	163	7430	2.2
1954	197	1	3	8	185	8548	2.2
1955	213	3	4	8	198	8780	2.3
January 1, 1956	218	3	4	8	203		

. . . . . Shewhart Medal Award

The concept of the Shewhart Medal originated early in 1947 and plans for it were consummated in 1949. The father of this Award, the man whose untiring efforts brought the plan to fruition, is Mr. Philip L. Alger of General Electric. The best statement of the plan and purpose of the Award was made by Mr. Alger at the Boston Convention in 1949. His speech is reproduced as it appeared in the May 1949 issue of *Industrial Quality Control*.

The Shewhart Medal—Its Origin and Purpose

"In June of 1947, the Directors of our Society voted to establish the Shewhart Medal for the recognition of individuals who have made 'suitably outstanding contributions to the cause of quality control.' In September, the Medal Committee was appointed, and in the following July its plans were announced. Six months later, your generous response had brought the medal fund to

the desired total of nearly $2,000. This has enabled us to pay all expenses for creating the medal, with a remaining balance of some $200, that will cover the cost of future medals for several years to come."

"The committee members believe that the young artist, Robert Weinman, whom we selected to execute the medal, has created a very distinguished work of art. The medal design in reverse portrays a micrometer emblazoned with a control chart, signifying the taming of rampant manufacturing variations by the new art of quality control. The obverse presents a striking likeness of Dr. Shewhart, including his glasses and the benign expression with which we are all pleasantly familiar."

"The real questions before us this evening, however, are: why should we have such a medal at all, and to whom should it be awarded?"

"We *elect* persons to office, so that they may perform governmental or political services for us—thoughts of our own benefit being uppermost when we vote."

"We *appoint* other persons to positions in industry or government, so they may perform necessary tasks—here again with thoughts of results beneficial to ourselves."

"The process of choosing a medalist is quite different."

"We *select* a medalist, to do him honor, with no thought whatever of any quid pro quo on his part. There is a real social benefit from this, however."

"This benefit accrues when the act of awarding the medal focuses the spotlight of public attention on the recipient, revealing in clear light the qualities that have won for him the esteem of his peers. In this way, the public obtains a glimpse of the values that make up a profession such as ours, and young men everywhere are inspired to emulate the ideals personified by the medalist."

"What are these qualities that lead us to so honor a man as to give him a medal? First of all, he must have intellectual ability, enabling him to clear away a little of the dark cloud of ignorance that always surrounds us. Second, he must have the generosity of spirit that leads him to so express and restate his pioneering ideas that other members of his profession may benefit from them. And finally, he must have that warmth of human feeling that marks the true educator, endearing him to his students or disciples, even those who learn from him only remotely."

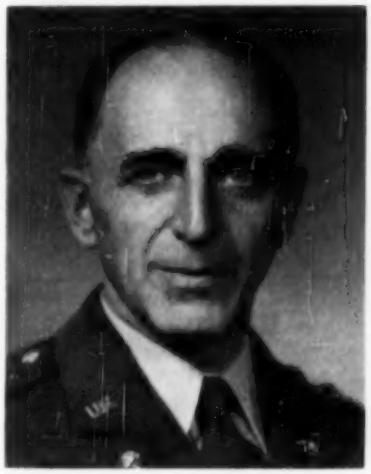
"All of these qualities are eminently personified in Dr. Walter Shewhart. The members of your medal committee feel honored to have been the instruments of your appreciation for his generous and pioneering contributions to the new profession of quality control."

The first medal struck was presented to Dr. Shewhart as shown in the accompanying reproduction from the cover of the May 1949 issue of IQC. The Medal has been awarded annually since then as a feature of the Banquet at the Annual Convention.

The roster of Medalists follows.

SHEWHART MEDALISTS

Major General Leslie E. Simon
U. S. Army (Ret)—1949



Citation

"In recognition of his pioneer achievements in the development and use of statistical quality control, his contributions to the literature in this field, and especially his leadership in the development of war standards and surveillance systems. These were of inestimable value in the recent period of national emergency, and they have aided greatly in creating the new profession of statistical quality control."

Born

Memphis, Tennessee, August 11, 1900

Education

B.S., 1924, United States Military Academy
1929, Massachusetts Institute of Technology

Military Career

Philippine Islands
Fort Sill, Oklahoma

Military Technical Work

1933-1937, Picatinny Arsenal, Dover, New Jersey
1937-1940, Aberdeen Proving Ground
1940-1949, Director, Ballistic Research Laboratories
1943-1944, European Theater of Operations, Ammunition Sampling for Normany Invasion
1945, European Theater of Operations, Investigation of German research during World War II
1949-1951, Chief of Research and Development, Army Ordnance
1951-1955, Assistant Chief of Ordnance

ASQC

Editorial Board, 1946-1953
Shewhart Medal Committee, 1950-1955

Authorship

An Engineer's Manual of Statistical Methods, John Wiley & Sons (1941)
German Research in World War II, John Wiley & Sons (1947)
Forty articles, technical reports, and papers on scientific, ballistic, engineering, statistical, and quality control subjects in numerous government and professional publications (including three in IQC,) and an almost equal number of papers under security classification on ballistic and ordnance development subjects (1929-1955)

Other Technical Societies

Fellow, Institute of Mathematical Statistics
Fellow, American Statistical Society
American Ordnance Association
Member, Committee on Aerodynamics, NACA
Member, War Standards Committee, American Standards Association
Member, Committee on Quality Control of Materials, American Society for Testing Materials

Honors Awarded

Legion of Merit, U. S. Army

Harold F. Dodge—1950

Citation

"In recognition of his many original contributions to the art of statistical quality control, his pioneer achievements in scientific sampling inspection, and his leadership in the development of quality control standards for industry. These contributions have exerted a deep and stimulating influence on the founding and growth of quality control as a new engineering profession."

Born

Lowell, Massachusetts, January 23, 1893

Education

S.B., 1916, Electrical Engineering, M.I.T.
A.M., 1922, Physics and Math, Columbia University

Teaching

1916-1917, Instructor, M.I.T.

Industrial

1917-1924, Member of Technical Staff, Western Electric Company
1925 to date, Member of Technical Staff and Quality Results Engineer, Bell Telephone Laboratories

Other Awards

Award of Merit, 1950, ASTM
Marburg Lecturer, 1954, ASTM

Civic

1931-1948, Member and Chairman for ten years, Borough Planning Board, Mountain Lakes, N. J.
1949, Outstanding Citizen, Mountain Lakes, N. J.

ASQC

Chairman, 1947 to date, Standards Committee
Member, 1946-1954, Editorial Board, *Industrial Quality Control*
Member, Shewhart Medal Committee, 1950-53; 1955-
Executive Chairman, 1946-1947, Committee on Relations with Other Technical Societies

Authorship

Three articles on analysis of heart and lung sounds, 1924-1926, and 21 additional articles on sampling inspection and quality control items in scientific, engineering, and technical publications (including six in IQC,) 1924-1955

Other Technical Societies

Member, American Society for Testing Materials
Chairman, Technical Committee E-11 on Quality Control of Materials, 1946 to date
Fellow, American Statistical Association
Fellow, Institute of Mathematical Statistics

Other Activities

During World War II served as Consultant to the Secretary of War, Office of Chief of Ordnance, 1942-1944; one of a small group that developed Army Ordnance (and ASF) Standard Sampling Tables
Chairman, 1941 to date—American Standards Committee on Quality Control, (responsible for ASA Standards Z1.1, Z1.2 and Z1.3 on Quality Control)

Dr. Martin A. Brumbaugh—1951

Citation

"In recognition of his contributions as an accomplished teacher, his leadership as consultant and director in applications of industrial statistics, and his pioneering as founder and first editor of the magazine, *Industrial Quality Control*, industry and his colleagues have gratefully shared the results of his enduring achievements."

Born

James Creek, Pennsylvania, September 8, 1896

Education

A.B., 1918, Juniata College
A.M., 1921, University of Pennsylvania
Ph.D., 1926, University of Pennsylvania

Teaching

1919-1929, Assistant Instructor, Instructor, Assistant Professor, University of Pennsylvania
1929-1947, Professor, University of Buffalo

Industrial

1947 to date, Director, Department of Statistical Analysis, Bristol Laboratories

Military

1918-1919, United States Army

ASQC

First Editor, *Industrial Quality Control*
Examining Committee, 1946-1951; 1955-
Vice President, 1951
Shewhart Medal Committee, 1952-1955
Sectional Representation Committee, 1952-1954
Historical Committee, 1954-

Authorship

Direct Method of Determining Cyclical Fluctuations of Economic Data, Prentice Hall (1926)
Analysis of Production of Worsted Sales Yarn, (with Williams and Davis,) University of Pennsylvania Press (1929)
Buffalo Home Ownership Study, Presidents Conference on Home Building and Home Ownership (1931)
Study Problems in Business Statistics, (with Riegel,) American Book Company (1934)
Business Statistics, (with Kellogg,) Richard D. Irwin, Inc. (1941)
Editor, *Quality Control in Central New York Industry —A Case Book*, Salina Press (1952)
Ten articles on statistical subjects (including six in IQC) (1924-1955)

Other Technical Societies

Institute of Mathematical Statistics
Fellow, American Statistical Association
Fellow, American Association for the Advancement of Science
Biometrics Society

George D. Edwards—1952

Citation

"In recognition of his contributions to the science of quality control as a director of basic pioneer development work, his expert guidance of the wartime program which resulted in widespread introduction of new acceptance quality control procedures in military procurement, and his leadership in organizing the American Society for Quality Control and in developing it into a strong professional society. His many activities have contributed heavily to the advancement of quality control as a new engineering profession."

As first president of ASQC, Mr. Edwards' biography appears on Page 16; hence will not be repeated here.

Eugene L. Grant—1953

Citation

"He is recognized as a pioneer and leader in the teaching and exposition of quality control. He contributed markedly to the indoctrination of industry in the basic applications of statistics which lead to formation of the American Society for Quality Control. His book, *Statistical Quality Control*, has become a standard text throughout the world. His technical merit and exceptional personal qualities have advanced the prestige of quality control as a new science."

Born

Chicago, Illinois, February 15, 1897

Education

B.S., 1917, University of Wisconsin
A.M., 1928, Columbia University
C.E., 1928, University of Wisconsin

Teaching

1920-1930, Instructor, Assistant Professor, Associate Professor, Professor, Montana State College
1930 to date, Associate Professor, Professor, Stanford University

Industrial

Miscellaneous short engagements as employee or consultant for various government agencies and industrial firms

Military

1918-1919, United States Navy

ASQC

Standards Committee, 1947 to date
National Director, San Francisco Bay Area Section, 1950-1951
Editorial Board, 1950-1955

Authorship

Principles of Engineering Economy, Ronald Press, 1st edition, 1930; 3rd edition, 1950
Statistical Quality Control, McGraw-Hill Book Company, Inc., 1st edition, 1946; 2nd edition, 1952
Depreciation, (with Paul T. Norton, Jr.) Ronald Press, 1949, revised printing, 1955
Handbook of Industrial Engineering and Management, (editor, with W. G. Ireson) Prentice-Hall, Inc., 1955
Thirty articles in technical and management press and in engineering society proceedings on various aspects of engineering economy, depreciation, and quality control (including two in IQC.)

(Continued on page 28)

ORGANIZATIONAL MEETING

Official Representatives

Compiled from identical minutes of A. L. Davis and H. J. Becker combined with the personal memory of M. A. Brumbaugh.

W. R. Purcell, Boston
P. S. Olmstead, Newark
H. W. Poole, Philadelphia
A. Kalmbacher, Delaware
R. A. Hefner, Georgia (not present)
E. M. Schrock, Pittsburgh
W. R. Weaver, Ohio
L. A. Knowler, Indiana
E. H. Robinson, Chicago
R. M. Hammes, Illinois
H. J. Becker, Northwestern
F. J. Halton, Jr., Iowa
E. D. Thompson, Milwaukee
M. W. Blackwood, Detroit (not pictured)
A. J. Winterhalter, Jr., Buffalo
A. L. Davis, Rochester
R. W. Coolbaugh, Syracuse

FEBRUARY 16, 1946

Additional Representatives

Compiled from the personal memory of M. A. Brumbaugh.

M. A. Brumbaugh
P. C. Clifford (not pictured)
H. F. Dodge
G. D. Edwards
G. R. Gause (not pictured)
B. F. Litzau
J. Manuele
W. S. Oliver
E. R. Ott
Paul Peach
A. I. Peterson
H. G. Romig
R. E. Wareham

Other Technical Societies

American Association for the Advancement of Science
American Geophysical Union
Fellow, American Statistical Association
American Society for Engineering Education
American Society of Civil Engineers
Econometric Society
Institute of Mathematical Statistics

Dr. Harry G. Romig—1954

Citation

"The Shewhart Medal, established by the American Society for Quality Control for outstanding leadership in modern quality control, awarded to Harry Gutelius Romig for the year 1953 in recognition of his contributions to the early developments of statistical quality control, his achievements in the development of widely adopted standard tables for sampling inspection, and his invaluable service to others as teacher, guide, and friend in promoting the understanding and use of quality control methods from coast to coast."

Born

Lawson, Missouri, October 10, 1900

Education

A.B. with Honors in Mathematics, 1921, Pacific University
Graduate Studies, 1922, University of Washington
A.M. in Mathematics, 1923, University of California
Graduate Studies, 1927-1933, New York University
Ph.D. in Industrial Engineering, 1939, Columbia University

Teaching

1921-1922, Instructor Silverton High School, Silverton, Ore.
1922-1924, Teaching Fellow Physics, University of California
1924-1926, Instructor, San Jose State College, San Jose, California
1936-1937, Special Instructor Evenings, Brooklyn College
1941-1942, 1947, Special Lecturer Ind. Engr., Columbia University
1951-1952, Special Instructor, University of California, Los Angeles Branch
1954 to date, Special Instructor Engineering, University of Southern California

Industrial

1926-1951, Member of Technical Staff, Bell Telephone Laboratories, New York, N. Y.
1951-1953, Staff Engineer, Quality Manager-Central Quality Control, Technical Director of Quality Control, Hughes Aircraft Co., Culver City, Calif.
1954-1955, Director of Quality Control, International Telemeter Corporation, Los Angeles, Calif.
1955-Present, Director of Quality Control, Summers Gyroscope Company, Santa Monica, Calif.
1953- Industrial Engineering Consultant for numerous firms in Los Angeles Area and Ogden Air Material Area, Hill Air Force Base, Utah

Military

1918-1919, U. S. Navy—Active Duty
1917-1921, U. S. Naval Reserve, Radioman 1st C.
1926-1932, U. S. Naval Reserve, Lt. (jg) Communications

ASQC

Chairman Metropolitan Section 1949-1950; Chairman Los Angeles Section 1953-1954; Many other Offices in these two Sections
Editorial Board, *Industrial Quality Control*, 1951-1956
Examining Committee, 1955-
Awards Committee, 1955-
Administrative Technical Committee, Industrial Engineering, 1955-
Vendor-Vendee Relations Committee, 1955-

Authorship

Allowable Average in Sampling Inspection, Columbia University (1939)
(Joint with H. F. Dodge) *Sampling Inspection Tables*, John Wiley & Sons (1944)
50-100 Binomial Tables, John Wiley & Sons (1953)
Sixteen articles on technical, engineering, sampling

Congratulations

on the

Tenth Anniversary

of

American Society for Quality Control

SCINTILLA DIVISION

Bendix Aviation Corporation

Sidney, New York

inspection, and quality control subjects in various scientific and technical publications (including two in IQC,) 1924-1955

Other Technical Societies

American Society for Testing Materials—Member, Committee IX, E-1, now E-11 (Task Group)
RETMA-JETC-11 Sampling Committee; two Committees on Sampling Procedures for Radio Components; Quality Acceptance Procedures Committee
Institute of Mathematical Statistics (Served on National Council)
Fellow, American Statistical Association
Senior Member, Institute of Radio Engineers
Senior Member, Society of Applied Industrial Engineering
Society for Nondestructive Testing
Biometrics Society
Econometrics Society
American Society for the Advancement of Science
Inspection Committee-AIA, 1951-1953

Dr. Edwin G. Olds—1955

Citation

"In recognition of his contributions to the development of quality control principles; his pioneering in connection with the quality control courses given by the Office of Production Research and Development, War Production Board; and his teaching, inspiration, and technical contributions to the foundation and growth of the American Society for Quality Control."

Born

Buffalo, New York, April 20, 1898

Education

A.B., 1918, Cornell University
M.A., 1925, University of Pittsburgh
Ph.D., 1931, University of Pittsburgh

Teaching

1918-1922, Secondary Schools
1922 to date, (on academic leave, 1943-45) Instructor, Assistant Professor, Associate Professor, Professor, Carnegie Institute of Technology
1943-1955, Lecturer at intensive courses in statistical quality control, Agricultural and Mechanical College of Texas, Case School of Applied Science, Georgia School of Technology, Illinois Institute of Technology, Michigan State College, North Carolina State College, and the following universities: Buffalo, Colorado, Illinois, Iowa, Michigan, Ohio State, Princeton, Purdue, Stanford, Syracuse, Tennessee, Washington (St. Louis)

Government Service

1943-1945, Chief Statistical Consultant, Office of Production Research and Development, War Production Board

Industrial

1938 to date, Statistical Consultant, services to a number of companies and research projects

ASQC

Member Editorial Board, *Industrial Quality Control*, 1946-1954
Examining Committee, 1949-1954
Education Committee, 1952-1954
Brumbaugh Award Committee, 1954-
Applied Methodology Committee, 1955-
Shewhart Medal Committee, 1955-

Authorship

Thirty-seven articles on mathematical, statistical, engineering, and quality control topics in various technical, scientific, and statistical publications (including four in IQC) 1928-1955

Other Societies

American Mathematical Society
Mathematical Association of America
Fellow, American Association for the Advancement of Science
Fellow, Institute of Mathematical Statistics
Fellow, American Statistical Association
Royal Statistical Society, Research Section

***Editorial Note:** We regret that space does not permit printing the detailed listing by title and source reference of the papers published by the Shewhart Medalists, and reported to us by them.*

Ortho

OBSTETRICAL · GYNECOLOGICAL
PHARMACEUTICALS AND BIOLOGICALS
FOR THE MEDICAL PROFESSION

ORTHO PHARMACEUTICAL CORPORATION
RARITAN, NEW JERSEY

. . . . . Brumbaugh Award

The story behind this award can probably best be told by starting with the original approved write-up which was made in May of 1949.

Historical

At the completion of the Second Annual Convention of the American Society for Quality Control and the Fourth Annual Rochester Clinic, a substantial profit was shown and it was the wish of the Rochester section that a goodly share of this profit be earmarked for the benefit of the American Society for Quality Control and the science in general. Accordingly, a part of this money was turned over to the American Society for Quality Control with the recommendation that a Brumbaugh Award be established in recognition of the early work done for the Society by Martin Brumbaugh, founder and first editor of the magazine *Industrial Quality Control*.

The above suggestions, having met with favorable action of the executive committee, were approved on June 17, 1948. In view of this action, the following committee was appointed by the President of the American Society for Quality Control to work out the details.

Halsey H. Kent, Chairman
Joseph J. Ferri
Charles R. Scott
Parker D. Deans
Claudius S. Barrett
Wyatt R. Lewis
H. Harold Sheaffer
Mason E. Wescott

Purpose

To award annually a cash prize and suitable scroll to the author of the article published in *Industrial Quality Control*, that is judged to have made the greatest contribution to the development of industrial applications of quality control.

Committee Appointment

The committee shall consist of eight (8) members, two (2) being appointed each year by the President to serve for a four (4) year term. The chairman is to hold office for two (2) years being appointed by the President of the Society from one of the six (6) hold-over committee members.

Committee Powers

The committee should have full power to select the winner and arrange the presentation ceremonies so as to tie in suitably with the American Society meetings. However, the decisions of the committee are subject to review by the executive committee and no public announcement should be made until any suggestions the President may wish to make have been considered. This has the effect of making the President an ex-officio member of the committee.

Award and Method of Procurement

The award shall be fifty dollars until such a time as it can be increased to one hundred dollars and shall be derived from the interest obtained from the original one thousand dollar fund set up by the Rochester section and from interest earned on any future gifts to the fund. If the interest is insufficient to produce the total amount of the award, the difference may be obtained from the General Funds of the Society or by drawing from the principal so as to meet the fifty dollar award figure.

Selection of Award Winner

The first winner shall be selected from the writers of articles from the period of July 1944 to June 1949 inclusive. Future winners shall be selected on a yearly basis being chosen from writers of articles published during the current Society year.

The winner of the award shall be selected by the following three step method.

1. Recommendations for the award shall be mailed or handed to the Executive Secretary in *writing* by verified corporate members of the Society, not later than November 1st, of each year. For the determination of the first winner, recommendations will be accepted up to November 1, 1949.
2. After a review of the recommendations, the Award Committtee shall vote and determine the winner. A two-thirds vote of the Award Committee shall be necessary to win, and the winner is to be determined within sixty days after the close of the nominations or before January 1st.

1950—Leonard A. Seder

1953—Albert G. Klock, Charles W. Carter

1951
Irving
W.
Burr

1954
Edwin
G.
Olds

1952—Dorian Shainin

1955—Daniel B. Delury

3. In the event that an insufficient number of recommendations have been filed with the Award Committee by verified corporate members of the society by the expiration of any voting year, the committee

   (a) may declare the Award vacated for the voting year, or

   (b) shall initiate nominations from among its own members. From the roster of candidates thus determined, the committee shall select a winner subject to the procedure outlined in (2) above.

Notification of Award Winner

After the winner has been selected by the committee, it is the responsibility of the President of the ASQC to so notify him and arrange for the presentation. As soon as the winner's acceptance has been received, announcement of the award shall be made to the press and in the Journal of the Society.

Presentation Ceremony

Presentation of the award is to be made at a general meeting of the Society, preferably during the annual convention each year. A representative of the committee should first present a brief story of the purpose and the history of the award. Following this, the President will read the citation and present the award.

The above rules and regulations have stood the test of time and throughout the years recipients of the award have been selected in regular order as shown below.

1950	Leonard A. Seder QC Consultant Malden, Mass.	*Techniques of Experimenting in the Factory* Vol. IV, No. 5, March 1948
1951	Irving W. Burr Statistical Lab Purdue University Lafayette, Ind.	*A New Method for Approving a Machine or Process Setting* Part I—Vol. V, No. 4, January 1949 Part II—Vol. VI, No. 2, September 1949 Part III—Vol. VI, No. 3, November 1949
1952	Dorian Shainin Rath and Strong, Inc. Boston, Mass.	*The Hamilton Standard Lot Plot Method of Acceptance Sampling by Variables* Vol. VII, No. 1, July 1950
1953	Albert G. Klock Bigelow-Sanford Carpet Co. Thompsonville, Conn. *and* Charles W. Carter Rath and Strong, Inc. Boston, Mass.	*Woolen Carding Meets Quality Control* Vol. VIII, No. 6, May 1952
1954	Edwin G. Olds Carnegie Institute of Technology Pittsburgh, Pa.	*The Place of SQC in an Industrial Organization* Vol. IX, No. 6, May 1953
1955	Daniel B. Delury Ontario Research Foundation Toronto, Ont.	*On the Design of Experiments* Vol. X, No. 4, January 1954

It will be noted from the above that it was hoped that the award of fifty dollars could be increased as the years went on. This has not as yet become possible, however, in spite of contributions from numerous sections and regional conferences. At present the fund stands at a figure of $2,053.27, and it is earnestly hoped that before long contributions will expand so that a higher monetary award can be given.

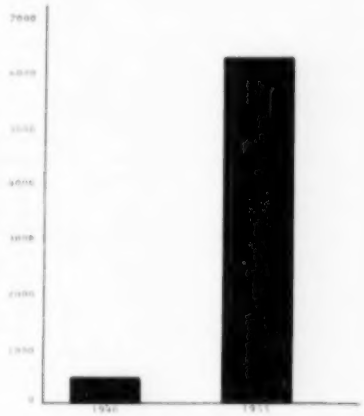
The basic intent of the award appears to have been achieved. Writers are providing good articles for our national publication, *Industrial Quality Control*, and the early efforts of the man for whom it was set up are being duly recognized and remain as a challenge to others.

Halsey H. Kent
Chairman, Brumbaugh Award Committee

. . . . Organizations Employing Members of ASQC, 1946 and 1955

The actual number of employing concerns in 1946 was compiled from the 1946-47 Yearbook. The count is necessarily an underestimate because approximately 25 percent of the members gave no company affiliation. However, the underestimate is certainly less than 25 percent because many of these were employed by companies named by other members in the same section. The 1955 records are not subject to this cause of misestimation because company affiliation is now a basic part of the business office record.

In both years a company was counted only once regardless of the number of employees who are (were) members of the society. As shown in the accompanying graph, the present list of 6250 concerns is a thirteen fold increase over the 469 concerns in 1946. After correction of the earlier record for bias, the increase would be at least eleven fold. This is extremely important for the future of quality control, because, by contrast with the five or six fold increase in membership, it shows that the society is not growing by piling up multiple membership in a few concerns, but through the much more important circumstance of adding new members from new users of quality control technique.



. . . . . List of Advertisers in IQC, September 1945 - June 1955

Volume II - Volume XI

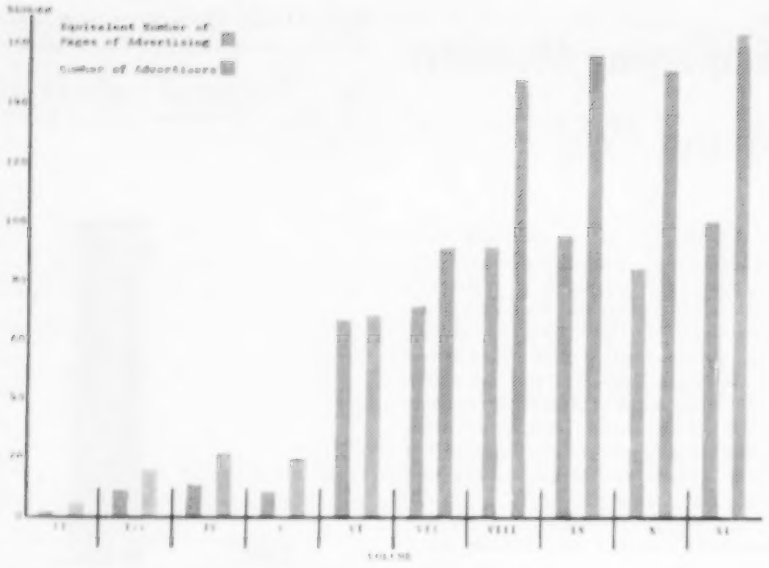
No issue commemorating the first ten years' growth of ASQC could be complete without a suitable acknowledgement to that large body of people who have helped to make it possible—our advertisers in *Industrial Quality Control*. Most publishers today in talking to and about their advertisers stress the side about how good their publication is as an advertising medium and how much value the advertiser receives in reaching the market offered by the magazine. While we, too, feel that our advertiser gets good value received from his advertising in IQC, there is another side to the picture and that is the value of the advertiser to the magazine.

In this issue devoted to highlights in ASQC's progress, it is this side of the picture we wish to stress here. There is no doubt that the support of our advertisers has enabled the Society to give you a much better quality magazine than would have been possible without it. Accordingly it is with sincere appreciation and pride that we present the list of all our friends who have helped so immeasurably.

Wendell H. Abbott
AC Spark Plug Div., GMC
Aircraft Div., Fairchild Engine & Airplane Corp.
Allis-Chalmers Mfg. Co.
Allison Div., GMC
Aluminum Company of America
American Bosch Corp.
American Can Co.
American Coil Spring Co.
American Society for Metals
American Statistical Association
American Steel & Wire Div., U. S. Steel Corp.
B. C. Ames Company
Amplex Div., Chrysler Corp.
Anaconda Wire & Cable Co.
Apparatus Div., General Electric Co.
Atomic Power Div., Westinghouse Electric Co.

Baird Associates, Inc.
Ball Brothers Co., Inc.
Bausch & Lomb Optical Co.
Harmon S. Bayer, Quality Control Consultant
Bay State Abrasive Products Co.
Bell Telephone Laboratories
Bender Calculator Co.
Bendix Radio Div., Bendix Aviation Corp.
J. N. Berrettoni & Associates
R. G. Bock Engineers
Borg-Warner Corp.
Bossert Co.
Bristol Laboratories, Inc.
The Broderick Company
William C. Brown Co.
Brown and Sharpe Mfg. Co.
Brush Electronics Co.
Bryant Chucking Grinder Co.
A. R. Burgess
Burgess Battery Co.

The Carborundum Co.
Case Institute of Technology
J. I. Case Co.
Celanese Corporation of America



Cessna Aircraft Corp.
Chicago Section, ASQC
Hotel Cleveland
Cleveland Instrument Co.
Colgate-Palmolive Co.
Collins Microflat Co.
Columbia University
Comptor Co.
Continental Motors Corp.
Convair, Division of General Dynamics
R. F. Cook Mfg. Co.
Cosa Corp.
Cummins Engine Co.

Davison Chemical Corp.
Deere & Company
DeLaval Separator Co.
Delco-Remy Div., GMC
W. Edwards Deming
Detroit Diesel Engine Div., GMC
J. W. Dice Co.
Do-ALL Co.
Dominion Foundries & Steel, Ltd.
Edward Don & Company
Allan B. Dumont Laboratories
Dumore Co.

Eastman Chemical Products
Eastman Kodak Co.
Edwards & Broughton Co.
Elliott Service Co.
Esterbrook Pen Co.
Exact Weight Scale Co.

Federal Products Corp.
Ford Motor Co.
Free Press
Fuller Brush Co.
Funk & Wagnalls Co.

Gaertner Scientific Corp.
Geometric Tool Co.
Graphic Calculator Co.
Greenfield Tap & Die Co.
Guide Lamp Div., GMC

Alexander Hamilton Institute
Hamilton Beach Div., Scovill Mfg. Co.
Larry Hammond Co.
Harrison Radiator Div., GMC
Hathaway Manufacturing Co.
Bernard Hecht
Hudson Motor Car Co.
Hughes Aircraft Co.
Hunter Douglas Corp.
Hunter Pressed Steel
Hunter Spring Co.

Industrial Manufacturing Corp.
Industrial Press
Inland Automatic, Inc.
International Business Machines Corp.
International Harvester Co.
International Latex Corp.
Iowa Section, ASQC
Richard D. Irwin, Inc.

Johns-Manville Corp.
Johnson Gage Co.
Johnson & Johnson
Jones & Lamson Machine Co.
Jones & Laughlin Steel Corp.

Kelsey-Hayes Wheel Co.
Kimberly-Clark Corp.
King-Seeley Corp.

Ladish Company
Lamson & Sessions Co.
Lightning Calculator Co.
Lukens Steel Co.

Machine Products Corp.
Magnaflux Corp.
Management Controls
Manufacturing & Industrial Engineers
Marchant Calculating Machine Co.
Glenn L. Martin Co.
Mattatuck Manufacturing Co.
McGraw-Hill Book Co.
McWane-Pacific Cast Iron Pipe Co.
Michigan Section, ASQC
Micrometrical Manufacturing Co.
Midwest Conference Board, ASQC
Miller Brewing Co.
Minneapolis-Honeywell Regulator Co.
Minneapolis-Moline
Minnesota Mining & Mfg. Co.
Monroe Calculating Machine Co.
Motorola, Inc.

Nash Division
National "U" Association
New Departure Div., GMC
New Holland Machine Div.
Nilsson Gage Co.
Norton Company

Ohio Rubber Co.
Oldsmobile Div., GMC
Oliver Corp.
Optical Gaging Products, Inc.
Owens-Illinois Glass Co.

Perfect Circle Corp.
Hotel Pfister, Milwaukee
Pitman Publishing Co.
P M Industries, Inc.
Pontiac Motor Div., GMC
Pratt & Whitney Co.

Quality Control Institute (W. E. Jones & Staff)
Qualco

Remington-Rand Corp.
Republic Steel Corp.
Rheinhold Book Div.
Rimat Tool Co.
Rockbestos Wire & Cable Corp.
Rohr Aircraft Co.
Ryan Aeronautical Co.

Scale Specialties & Systems, Inc.
Scintilla Div., Bendix Aviation Corp.
Scott & Williams, Inc.
Screw Machine Products Co.
Leonard A. Seder
Schenley Industries, Inc.
George Sherr Co.
Sheffield Corp.
Size Control Co.
SKF Industries, Inc.
A. O. Smith Corp.
Solar Aircraft Co.
Sorenson & Company
Ivan Sorvall
Southwest Wisconsin Scenic Assoc.
Standard Gage Co.
L. S. Starrett Co.
Steel City Testing Machines
Steel Company of Canada, Ltd.
Stokeley-Van Camp
P. A. Sturtevant Co.
Sylvania Electric Products
Syracuse University Press

Talon, Inc.
Taft-Peirce Mfg. Co.
John I. Thompson & Company
Thompson Products, Inc.
Timken-Detroit Axle Co.
Timken Roller Bearing Co.
Tractor & Implement Div., Ford Motor Co.

United Air Lines
U. S. Department of Agriculture (Graduate School)
U. S. Pipe & Fondry Co.
University of Washington Press

Veeder-Root, Inc.
Victor Adding Machine Co.
Visi-Trol Corp.

Walco Bead Co.
Wamsutta Mills
Ralph Wareham
Warner Gear Div., Borg-Warner Corp.
Webber Gage Co.
Western Electric Co.
John Wiley & Sons
Willys Motors, Inc.
N. A. Woodworth Co.

Zenith Radio Corp.

Local Section News

". . . BUT NOT FORGOTTEN"

ALBUQUERQUE George O. Hawley, quality assurance department, Sandia Corp., led the educational session at the Dec. 5 meeting with a discussion of the lot-plot sampling inspection plan. William V. Record, manager of purchasing engineering, Hughes Aircraft Co., Tucson, Ariz., was the guest speaker for the general meeting. His topic, "Purchasing's relationship to quality control," was very well presented and created considerable discussion between attending personnel from quality and purchasing departments. The section committee members sampled Chinese food during a dinner-business meeting preceding the general meeting—no meals rejected!

ALLENTOWN -BETHLEHEM "Introduction to quality control," the first of a series of three courses to be offered by the section during the current year, was completed on Nov. 14. The classes were held at Muhlenberg College, Allentown, Pa. one evening each week for eight weeks. Each of the 37 "students" from several local industries were awarded a certificate of achievement by the instructor, Miss Bonnie Small. Four members of the local section assisted Miss Small in conducting the course.

The November meeting was held at the Allentown plant of the Western Electric Co. Fifty two members and guests enjoyed a plant tour which emphasized the application of control charts to manufacturing processes. The plant has some 3000 control charts currently in use —this was the main topic for a panel discussion the same evening at Walp's Restaurant in Allentown.

The section held its Dec. 14 meeting at Walp's Restaurant. Edward B. Haden, assistant secretary of Esterbrook Pen Co., and a prominent section member, spoke to 35 members and guests. Mr. Haden's topic was "Process capability studies."

BALTIMORE "Getting the most out of your $\bar{X}$ and R charts" was the subject of the Dec. 14 talk given by Dr. A. J. Duncan of the Johns Hopkins University Math Department. Dr. Duncan is one of the founders of SQC in the Baltimore area. The meeting was well attended by members and guests.

BATON ROUGE -NEW ORLEANS The section held its first all-day conference on Dec. 17. The co-sponsor of the conference was Loyola University of the South.

Four basic talks for management and a parallel three basic hours of instruction for those interested in techniques was offered. The New Orleans Chamber of Commerce, the Louisiana Engineering Society, and the Louisiana Association of Manufacturers also assisted.

BINGHAMTON The December meeting was held at the Vestal American Legion, Vestal, N. Y. on Dec. 6. A. B. Mundel of the Sonotone Corp. spoke on "Quality control in the electronics industry." The talk was very well received by all who attended.

BIRMINGHAM Wayne Biklen, director of quality control, American Safety Razor Co., Staunton, Va., was the speaker at the regular dinner meeting held Dec. 8. His talk illustrated by means of case histories many of the benefits derived from statistical quality control. Among the benefits illustrated were improved quality and lower costs, lessened amount of defective product accompanied by narrower tolerance limits, and improved labor relations with higher pay and higher productivity resulting from greater uniformity in semi-finished materials. He also discussed the tie-in of quality requirements with incentive pay. Members of the American Institute of Industrial Engineers and the Society for Advancement of Management were guests.

BUZZARDS BAY Fred C. Schulze, sales engineer for the Hunter Spring Co. in Lansdale, Pa. gave an illustrated lecture on "Customer-Vendor relations" on Dec. 13 at the Continental Screw Co. His talk covered statistical methods of analyzing shipments of raw materials, and techniques for inspecting manufactured products to assure quality that meets standard specifications. The use of frequency distributions in various applications were demonstrated.

CHICAGO Chicago section does it again! In cooperation with the Chicago Association of Commerce and Industry, the section put on its fifth annual two-day training program at the Hotel Sherman on Nov. 7-8. These programs have drawn from 220 to 297 since they were started in 1951, attendance this year being 241.

The program consisted of 12 one-hour sessions devoted to presentation and training in the basic concepts and methods of SQC. Charles L. Matz, Commonwealth Edison Co., is the training committee chairman for these programs; the instructors are: Irving W. Burr, Purdue University; John A. Henry, University of Illinois; Lloyd A. Knowler, State University of Iowa; Gayle W. McElrath, University of Minnesota.

This year, a luncheon meeting was scheduled on the second day for trainees and their management col-

Approximately half of the 1955 class

Instructors (left to right): Lloyd Knowler, Gayle McElrath, Jack Henry

leagues. Emphasis at this meeting was on quality control applications from the management viewpoint. Joseph D. Stockton, operating vice president of Illinois Bell Telephone was the luncheon speaker. The attendance was about 500.

The registration fee for this course regularly includes a half-year free membership in ASQC, however only about 50 percent of the registrants take advantage of this membership offer. Such a large proportion of the enrollment comes from upper echelons of management who attend the course just to get an idea of what SQC is all about that few have little interest in maintaining active contact with technical details. On the other hand, some 25 percent of those who do become members renew their membership.

On Dec. 7 a group of 70 members toured the Melrose Park plant of International Harvester Co. Prior to the tour, Lester Petersen, their quality control engineer, gave a brief summary of their applications of statistical techniques and future aims. The plant tour committee wishes to thank Mr. Petersen and his company for an enjoyable afternoon and the cordial welcome extended to our group.

At the "do-it-yourself" meeting held on Dec. 14 Henry Becker of the American Steel & Wire Co. presented a problem related to the heat-treating of wire. After the discussion of possible solutions by the audience, Mr. Becker explained the actual solution and presented control charts denoting the improvement of the process.

CINCINNATI For the December meeting, the section joined the Hamilton subsection for a joint meeting and plant tour as guest of the Hamilton mills of the Champion Paper & Fibre Co. on the evening of Dec. 14. Forty persons, including members of both groups were present for the tour and refreshments in the company cafeteria following the tour.

CLEVELAND A highly successful "triple-header" meeting was held jointly with the Youngstown section at the Goodyear Tire & Rubber Co. in Akron, Ohio on Dec. 9. The trio of events included a plant tour, a dinner, and a panel discussion. Subject of the discussion was "Relative efficiency of various sampling plans" and the panelists were: Chester Smith, Malloy Sharon Titanium Corp., Niles, Ohio; Charles Wies, Hoover Co., North Canton, Ohio; Phil Hardy, General Electric Co., Cleveland, Ohio; and Ralph Nottingham, Brush Electronics Co., Cleveland, Ohio. The moderator was Wendall Abbot, General Electric Co., Cleveland, Ohio.

In spite of very bad driving conditions, over 100 members and guests made the 30 mile hazardous trip from Cleveland. Mother Nature had dumped over three inches of snow on Cleveland just before the evening rush hour and traffic was considerably slowed down. Many who had registered for the meeting did not appear, but the hardy souls who braved the elements enjoyed the event.

COLUMBUS On Dec. 16 the members of the section enjoyed a social evening with their wives at the Jai-Lai Cafe. Miss Fern Sharp, local radio and television woman's feature commentator, was the principal speaker. In her talk, Miss Sharp not only emphasized the need for maintaining proper quality in production and advertising of goods, but she gave many interesting experiences in radio and television performances.

CORNING -ELMIRA L. A. Seder, a consultant from Malden, Mass., presented an interesting discussion on "Techniques for trouble shooting" at the December meeting held in Elmira. Approximately 100 members and guests heard Mr. Seder's talk, which also included a presentation of several of the special types of quality control charts used by Mr. Seder in his work.

S. John Cherry, president of the section and manager of quality control at the Westinghouse Horseheads plant, began the second phase of the section's course in quality control. Mr. Cherry will deliver four lectures on "An introduction to statistical quality control."

DALLAS -FORT WORTH Attendance for the current season reached a new high, when over 50 members and guests were present at the Dec. 8 meeting to hear Richard Ede, process metallurgist, U. S. Steel Corp., present his paper "Quality control in steel manufacture." Mr. Ede preceded his most excellent presentation with colored slides of steel production at the Gary Works plant. This served to orient his audience and added much to the complete success of the meeting.

DANVILLE -SUNBURY The December meeting featured Harold L. Springer, metallurgical analyst of the St. Joseph Lead Co., Monaca, Pa. He presented a very interesting description of his topic "Multiple correlation and control chart technique."

DAYTON The regularly scheduled meeting was held on Dec. 8 at the National Cash Register Co. A buffet style dinner was served following which the speaker, George S. Hargreaves of the National Cash Register Co., presented a very interesting and unique talk entitled "From kinks to scratches." His talk was especially interesting to those interested in visual quality as it was based on the production of sheet metal cabinets for cash registers and was supplemented with a color slide film that was narrated by Mr. Hargreaves showing the production of a sheet metal cabinet from the rough parts to the completed cabinet.

DELAWARE Dr. Ellis R. Ott was a most welcome guest and the principal speaker at the December meeting. Following his talk on "Statistics in engineering development and research," Ellis gave some of his impressions of the Indian people, their politics, and their current efforts to increase their industrial potential.

DENVER The section was appreciative of F. S. Cowing's talk "What management thinks of quality control." Mr. Cowing is vice president of manufacturing of the Heckethorn Mfg. Co. of Littleton, Colo. The success of the quality control program at the Heckethorn Co. was described at the December section meeting.

ERIE Dec. 14 gave us an introduction into fundamentals of electronic instrumentation when L. Neil Brown of Manning, Maxwell, & Moore spoke on electronic process control using an American microsen instrument demonstrator. The holiday program hampered attendance although a large group saw a repeat of the program at the Erie Resistor Corp. whose QC group sponsored the demonstration.

GEORGIA The fourth meeting of the Atlanta Group was for the textile members. There were seven members and two guests present. A paper on "Breaking strength control limits for various cotton yarn numbers" by E. G. Field, consulting management engineer, E. G. Field & Assoc., Atlanta, was delivered by Donald S. Holmes. This talk was illustrated by use of projector and easel furnished by the Southern Bell Telephone & Telegraph Co.

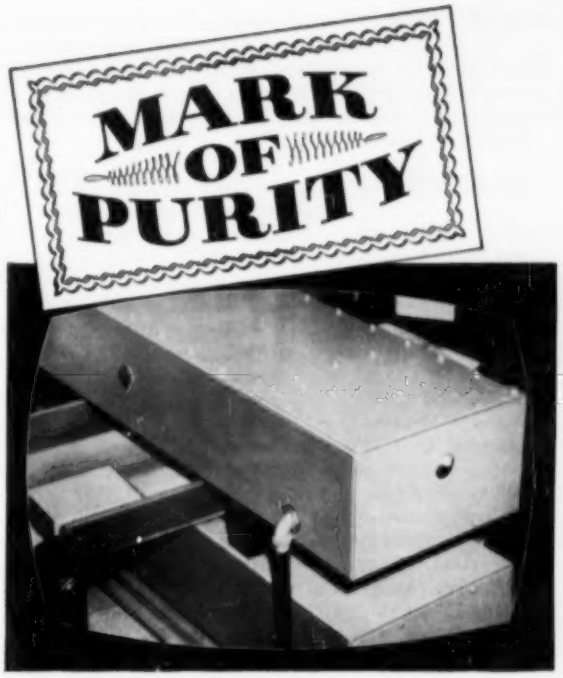
A basic course in quality control is being given each Monday night from 7:30 to 9:30 at the Georgia Institute of Technology. This course is being taught by Donald S. Holmes. Georgia Tech also gave a short course which was taught by Dr. J. J. Moder, Jr.

HARRISBURG Thirty five members and guests saw a Johns-Manville film and heard Phillip B. Proctor relate the relationship of the quality control department to inspection and production at Johns-Manville. After this there followed a discussion relative to the proper handling of customer complaints.

HARTFORD The executive committee meeting was held as usual at Club Alden on Dec. 7. The chief topic of discussion was the forthcoming Christmas party which was held at the Rockledge Country Club. This party, with wives and girl friends in attendance, was one of the best ever. A wonderful dinner followed by an evening of dancing made the party a complete success.

The December session of the 1955-56 clinic of the section was held on Dec. 8. The speaker was Samuel Simonovitz, consultant. His subject was "Controlling production quality."

INDIANAPOLIS The December meeting was a memorable one. The afternoon session was on "Sampling by variables," conducted by Charles Hicks of Purdue. The evening session started with a film presentation "Gaging for profit." The featured speaker of the evening, Walter Blickle of Cummins Engine Co. explained that after considerable experience in quality control administration he came to Cummins and found a healthy well developed program underway. Slides gave the audience an appreciation of the severe operating conditions a diesel engine must survive. He showed precision gaging equipment at Cummins. His talk was on the goals and conduct of quality control programs and it became evident that Cummins had attained leadership in quality control.



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KANSAS CITY On the night of Dec. 10 members and guests of the section gathered at the Homestead Country Club. Here the group indulged themselves in the section's first supper dance. The reaction would indicate that this December social activity would be perpetuated.

LOS ANGELES The December program for the Los Angeles section consisted of a case history of developing reliability in an airborne computer from its design stage, using quality control techniques, as related by J. H. Parsons of Hughes Aircraft Corp. Also included in this program was a demonstration of a special purpose computer used to plot histograms, by L. Mautner of Electronic Control Systems, Inc.

MICHIGAN The regular monthly meeting was held on Dec. 9 in Science Hall, Wayne University, Detroit. The featured speaker was Dr. Paul K. Leatherman whose subject was "Some applications of quality control for the brewing industry." This meeting was co-sponsored by the Master Brewers Assoc. of America and the American Society of Brewing Chemists.

The meeting was preceded by an advanced educational session on "Analysis of contingency tables" conducted by Dr. C. C. Craig of the University of Michigan.

MID-HUDSON The December meeting of the section was held on Dec. 6 at Nick Beni's Anchor Inn, Poughkeepsie, N. Y. with 44 members and guests present. The speaker for the evening was Robert L. Swiggett, executive vice president of Photocircuits Corp. who spoke on "Quality control problems in the printed circuit business."

MILWAUKEE On Dec. 12 the section enjoyed a "past president's" night to mark the 10th anniversary of the section. After a buffet supper at the Pan American Club, the section listened to the presidents reminisce about the section, ASQC, quality control, and generally about where we have been and where we are going.

We think we may be unique in having all of our past presidents still in Milwaukee and all but one still active in quality control. All were present, except the late Raymond S. Saddoris. The first president of our section, Harold R. Roethel, acted as master of ceremonies. (The accompanying photo shows top row, left to right: A. E. Jakel, A. Ceragioli, L. S. Eichelberger, H. R. Roethel; seated, left to right: B. F. Litzau, R. L. Hermann, I. W. Schoeninger.)

MINNESOTA The Dec. 6 meeting of the section consisted of a plant tour of the Aero Div. of the Minneapolis-Honeywell Regulator Co., Minneapolis. The 100 who attended saw the need for good quality control in the assembly and testing of gyros and other related equipment. They also saw the Honeywell Anolog Computer at work as well as tours through the manufacturing, assembly, model shop, and engineering test departments.

The two training courses sponsored by the section are now underway. The elementary course and the educational seminar on experimental design will continue for eight weeks.

MONTREAL The regular monthly meeting was held on Dec. 14 with over 50 members attending. J. B. Pringle of the Bell Telephone Co. of Canada gave a most interesting factual and enlightening talk on "What happens when we take samples." This covered some of the basic concepts of statistical quality control which are very useful but frequently forgotten or ignored.

NEW HAMPSHIRE The second meeting of the 1955-56 season was held in Rochester and Somersworth on Dec. 5. The afternoon program consisted of a plant tour of the General Electric's meter department, Somersworth. All phases of the manufacturing operations were seen by 30 members and guests.

The evening session consisted of a ham supper served to the group, home style. Our speaker of the evening was Dorian Shainin of Rath & Strong, Inc. Mr. Shainin gave a very informative and educational talk on "Reducing production difficulties by 1955 control techniques." Six industries were represented at the tour and evening session.

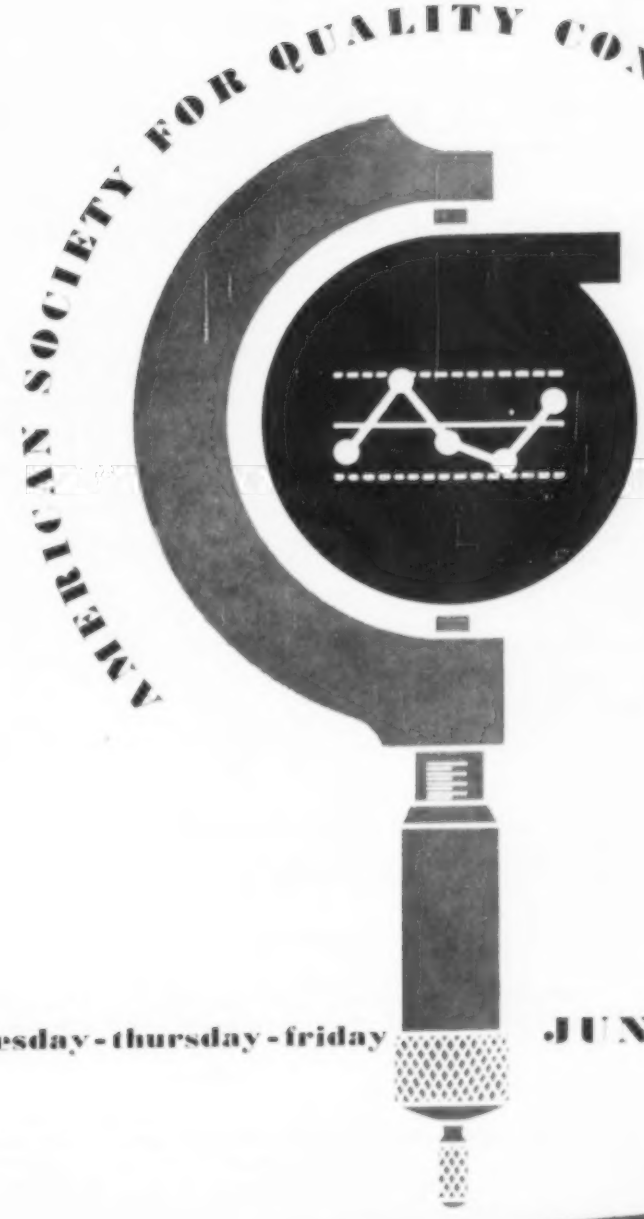
NEW HAVEN On Dec. 6 the fourth meeting of the season featured a clinic session, which was preceded by an old fashioned church supper of "Yankee pot-roast." The clinic sessions of three groups discussing tolerance analysis, process capabilities, and vendor relations proved to be very successful and the entire program was enjoyed by all.

NORTHEASTERN INDIANA Wm. F. Kirschbaum, inspection director, office of inspector, Naval Material, Fort Wayne, was guest speaker at the Dec. 8 meeting. His subject, "Use of quality control in Naval inspection," was of interest to everyone present.

PHILADELPHIA The annual Christmas party and dinner dance was held Dec. 12 at the Germantown Cricket Club. Donations from local companies gave each woman two gifts to take home. The gifts included cigarette lighters, clock radios, liquor, and beer.

PITTSFIELD Two members of the section spoke before a group of 40 members and friends at the regular monthly dinner meeting held Dec. 1 at the Stanley Club, Pittsfield. Dr. Laurence Spooner of General Electric Co. in Pittsfield discussed the theory and uses of probability paper, and vice chairman George

(Continued on page 42)



10th annual convention

wednesday - thursday - friday JUNE 6 7 8 1956

10th annual convention of THE AMERICAN SOCIETY FOR QUALITY CONTROL

CONVENTION HIGHLIGHTS

Technical Program

More than 80 speakers from the United States, Canada and Europe will talk on all phases of quality control, industrial statistics and operational research. Among the industries to be covered are chemical, metallurgical, food processing, aircraft, automotive, brewing, pulp and paper, etc. There will be interesting papers on the application of statistical techniques to accounting and business administration. A number of papers will be delivered in the French language.

Plant Tours

How are statistical quality control techniques applied in Canadian industries? You will see examples in a number of plant tours in the Montreal area:

Wednesday—tour of the Dominion Rubber Company plant.
tour of the ammunition plant of Canadian Industries, Ltd., at Brownsburg.

Thursday—tour of the Northern Electric Company cable division plant.
tour of Imperial Tobacco Company plant.

Exhibits

What's new in equipment? See for yourself in one of the largest exhibition areas in Canada—Le Palais du Commerce (the Show-Mart). Manufacturers of gauges and inspection equipment will have a full array of their latest developments. Many industries will have exhibits showing how quality control techniques are used by them.

Copies of Transactions

Take what you learned home with you. No note taking necessary. Copies of all talks will have been collected and printed before the Convention and will be available in bound volumes for $3.00 during the Convention.

Book Booth

To keep you up-to-date on the most recent developments, an exhibit of 60 of the latest books on quality control and industrial statistics will be held in the book booth.

Social Program

All work and no play makes even a statistical quality control convention a drab affair. You'll need relaxation after the heavy sessions. And you're going to get it. A social evening will be held Wednesday evening in the fabulous Champlain Room of the Sheraton Mount Royal Hotel . . . . . in the ballroom of the same hotel, the Annual Banquet will be held on Thursday evening. For those who wish to explore, Montreal, the Paris of North America, has some of the best night spots and wining and dining places on the continent.

Ladies Program

And the ladies have by no means been forgotten. Their program includes a luncheon and fashion show of the latest Canadian fashions, a tour of one of our largest super-markets, and a sight-seeing tour of Canada's largest city. And of course they'll have time for shopping.

BIENVENUE A QUEBEC

So you're coming to the 10th Annual Convention, are you? Well then, after it's over, why not stay here for awhile? Plan your vacation right along with the Convention and don't miss this golden opportunity of visiting the only French-speaking Province of Canada and taking advantage of some of the best vacation areas on the continent.

Montreal, the Convention Headquarters, is situated in the midst of all this and you can get to many interesting places in only a few hours of driving. For a run-down of things to do and places to go we suggest the following:

Laurentian Mountains

Just a short 40 miles north of Montreal are found the famed Laurentian Mountains, in Winter a skier's paradise and in Summer equally attractive. Surrounding Mont Tremblant, the Monarch of the mountains, are found many attractive places—from picturesque vacation villages, beach clubs, mountain golf courses, to the beautiful lakes which offer everything in the way of water sports. Cruise boats touring the lakes go right into some of the loveliest hide-aways in North America.

Fishing

If you're a fisherman, by all means don't forget to bring your tackle. The lakes and rivers of Quebec are so numerous that many of them have never been touched by a fly-line. Just around the time you'll be here the speckled and lake trout, walleyes, bass, and the big northern pike will all be biting. There are a great variety of fishing lodges, luxury resort hotels, and all types of accommodations for camping trips at your disposal, complete with guides, canoes and outboards.

Historical

Quebec was first discovered in the 16th century by the French and later taken over by the English in the 18th century. However, many of the original French relics and buildings have been preserved to this day. The centre of historical interest is Quebec City which can be reached either by car, train, or lake-cruising boats. The old frontier fortress city, once the Gibraltar of the New World, was originally built to fend off the Iroquois—and the rows of cannon still command the great grey cliffs overlooking the St. Lawrence River. The atmosphere of old France is re-created by the narrow cobblestone streets, overhanging dwellings and horsedrawn cabs which tour the city. If you're an amateur historian don't miss this chance of learning more about early North American history.

Further down the river from Quebec City is found the romantic Gaspé Peninsula which can be reached either by car or by cruising ships sailing out of Montreal or Quebec City. Once in this area you are taken back several centuries. The folk here are leisurely and serene, and live without the hustle and bustle of city living, just about the same as past generations. Great rocky cliffs and small sandy beaches in the coves provide beautiful scenery and allow you to take advantage of quiet country walks, lazing on a swimming raft, or slow talk around a beach bonfire at night.

Religious

Quebec is world famous for its many shrines and churches. In particular there is the Sanctuary of Ste. Anne de Beaupré, near Quebec City, which has welcomed visitors for over 300 years. Although the original chapel built in 1628 was destroyed by fire, all the precious relics were untouched and to this day they remain in the new church. In many of the older Quebec villages can be found other Shrines and Churches built many years ago and still standing today.

These few facts have only been glimpses into what Quebec can offer to the vacationing tourist. If you want to know more you can write to:

Province of Quebec Tourist Bureau
1013 Dominion Square
MONTREAL, P. Q.
Canada.

By the way, don't forget to attend the Convention in Montreal, June 6, 7, and 8, 1956.

TENTH ANNIVERSARY YEAR AWARD

With our goal of 10,000 members a possibility, your national membership committee announces a winter competition ending with awards. The section which does the most outstanding membership job will be presented with a handsome plaque as a permanent possession. The second and third top sections will receive certificates of honorable mention.

Membership gain for the entire 1955-56 fiscal year will be considered. All sections are now in the running. The method of appraisal will result in equal opportunity for all sections, large and small.

The only requirement is a written description of the section's membership activity not more than two typewritten pages in length. This must be received by Feb. 29, 1956. Please mail to

S. A. OLIVA
c/o Dictaphone Corp.
375 Howard Avenue
Bridgeport 5, Conn.

Top sections will be announced as soon as possible after the close of the competition on April 30, 1956.

With most renewals in, this is the time for half-year memberships at half the yearly dues. Many sections are successfully promoting a 1½-year membership which still provides half-year membership for the balance of this year.

REMEMBER — this is a one time award (not part of the Saddoris Award.) It will not be repeated next year. Let's bring in those new members now and make the ASQC goal of 10,000 members for 1956 a reality.

(Continued from page 38)

Lyman of Peter J. Schweitzer, Inc. in Lee spoke on loss control in the paper industry. Both talks were very well received.

RHODE ISLAND Twenty-five members of the section formed a caravan on the night of Nov. 15 for a journey to New Bedford, Mass. to hold a joint meeting with the Buzzards Bay section. A very interesting talk on "Statistical inventory control" was presented by Wilbur F. Hoehing of the Westinghouse Electric Corp., Pittsburgh, Pa.

On Dec. 15 Roy G. Volkman of the U. S. Rubber Co., Providence, spoke on a new technique he developed for the company. Mr. Volkman calls his new technique "Acceptance control charts."

ST. LOUIS On Thursday, Feb. 2 the St. Louis section began a series of four half-hour TV programs on statistical quality control. The series is entitled "A new tool in industry—statistical quality control." Part I on Feb. 2 was entitled "The laws of chance." Part II, "Control through measurement," was presented on Feb. 9; Part III, "Control through counting," on Feb. 16; and Part IV, "Control through sampling," will be given on Feb. 23. This series was organized, directed, and acted out by members of the St. Louis section under co-sponsorship of the St. Louis Chamber of Commerce. The programs are being presented over educational station KETC-TV in St. Louis at 8:30 pm.

SCRANTON -WILKES-BARRE The regular meeting was held on Dec. 14 at the Scranton YMCA. The evening's speaker was Wyatt Lewis, quality control consultant in management operations of the General Electric Co. in the new design control and special process study areas of quality control. His subject was "Quality control management, organization objectives, and responsibilities." His talk was followed by lively and interesting question and answer discussions, which proved very enlightening to all present.

SEATTLE A joint dinner meeting with the Washington State Purchasing Agents Assoc. was held Dec. 13 at the Olympic Hotel. Harry Beetham, Northwest Metal Products, representing the association, spoke on "The purchasing agent looks to quality control." Robert Stephen, Bemis Bros. Bag Co., representing the section, presented "Quality control looks to purchasing" stressing the importance of vendor rating techniques.

The third session of the educational series on the analysis of variance was presented on Dec. 6 in place of the regular monthly meeting. The "replication aspect" was discussed as well as a general discussion on the topics covered at the previous sessions. Although the entire educational series is to be a continuous study, the individual sessions have been planned in such a manner so that each session will be a complete unit in itself. Everyone is welcomed to participate in these sessions with the only prerequisite being an interest in the subject.

SOUTHERN CONNECTICUT On Dec. 14 the section was honored by the Scoville Manufacturing Co., Waterbury. Members and invited guests were taken on a guided tour of the plant. The host of the evening was Grove C. Baldwin, manager of quality and assistant to the vice president. The tour took the visitors through the casting shop, tube extrusions, and continuous strip mill—the most modern of

their types in the brass industry. Typical products manufactured by various Scovill divisions were also on display. A social evening followed the plant tour. The executive committee and members wish to give Scovill and Mr. Baldwin a big vote of thanks for an enlightening, enjoyable, and educational evening. (The above photo was taken at Doolittle Hall where a few of the thousands of typical Scovill fabricated products were explained to section officers by John J. Hoben, works manager of the Scovill Mills Division. From left to right: Mr. Hoben; Edward W. Demers, chairman of the Southern Connecticut section and quality control engineer of Metalix Mfg. Co., East Norwalk; Edgar W. Dawes, section treasurer and assistant research director of the Allison Co., Bridgeport; Frank Walsh, chairman of the section's arrangements committee and chief inspector of the Dictaphone Corp., Bridgeport; and Grover C. Baldwin, member of the section's executive committee and chief quality control engineer of the Scovill Manufacturing Co., Waterbury.)

SOUTH TEXAS A "let's get acquainted" annual stag party will certainly not be forgotten by the seventy-odd members who were present at the Frontier Inn on Dec. 14. Let it be said that the group was completely in tune with the program's theme, "Some human factors of interest to quality control men." Let it further be said that a good quality control man never tires observing a good "curve."

TOLEDO The December meeting of the section was entirely social. Corsages were presented to the member's wives and lady friends. A movie entitled "Dust or destiny" was enjoyed by all. Cards and dancing followed the enjoyable meal in this get-acquainted meeting.

The first meeting sessions of the section are now under way to make plans for the forthcoming display for Engineers' Week. As is the usual custom, ASQC will have a display on the products of quality control with possible television and radio programs explaining how SQC can be used to advantage.

WESTERN MASSACHUSETTS No technical meeting was scheduled for the month of December, however, the executive committee met Dec. 6 to review the finances, membership, management award standing, program, and education. Hibbard Busby was made local representative to contact industry for advertising in the May issue.

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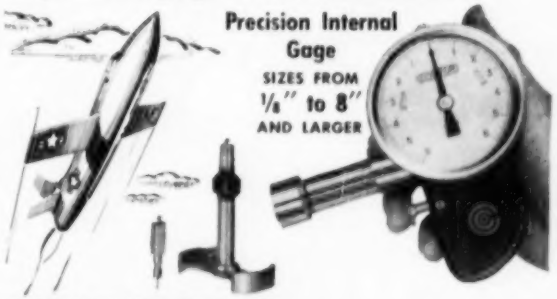

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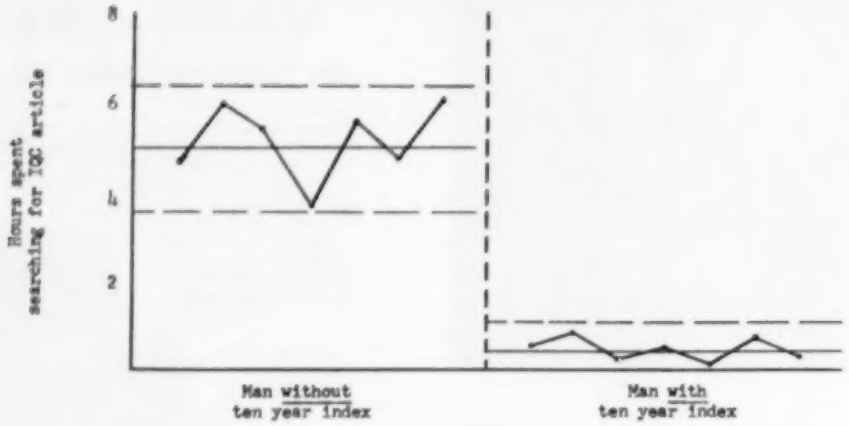

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WICHITA D. L. Roskam, vice president of Cessna Aircraft Co., was the principal speaker at the December meeting. Mr. Roskam addressed the group following the dinner in the Cessna cafeteria. Later, the members made a tour of the plant with special emphasis on the quality control department.

WINDSOR Eight members of the section attended the meeting of the Society of Industrial Cost Accountants on Dec. 15 at which Simon Collier of Johns-Manville, New York, spoke on quality control applications. Five of the members were in attendance at a joint meeting in Lambeth with the University of Western Ontario section.

WINNEBAGO A. R. Jackson, Mitchell Manufacturing Co., was guest speaker at the Dec. 5 meeting which was held at Art's Supper Club, Manitowoc, Wis. Mr. Jackson is author of a recent article, "Planning and operating a receiving inspection department," which appeared in the August issue of IQC. A training session preceded the regular dinner meeting.

WORCESTER Ervin Schiesel, chief engineer of the Mattatuck Mfg. Co. of Waterbury, Conn., presented a talk on "Engineering standards and tolerances" at a meeting held on Dec. 8. This was a joint meeting of the section and the American Society for Mechanical Engineers. A total of approximately 70 people were present from both organizations. The questions asked at the end of the talk showed considerable interest had been taken by both groups.

YOUNGSTOWN Bad weather and icy roads were responsible for several members to miss the fine dinner and interesting plant tour provided by the Goodyear Rubber Co. in Akron, Ohio. The plant trip was held in conjunction with the Cleveland section, a foster parent of the Youngstown section.

". . . CAST THEIR SHADOWS BEFORE"

ALBUQUERQUE The topic for the general meeting scheduled Mar. 5 will be "Production's relationship to quality control." J. L. Williams, quality assurance department, Sandia Corp., will lead the educational session with a discussion of "Control of quality of continuous production."

BALTIMORE The next section meeting will be a joint meeting with the Institute of Food Technologists at the Hotel Stafford. Dr. Howard Stier, chairman of the Washington section, will be guest speaker.

BINGHAMTON On Feb. 21 the section will act as host for the 18th annual dinner of the Technical and Engineering Council of Southern New York which is a feature of National Engineer's Week in this area. The dinner will take the place of the regular February meeting. Charles H. Rubin of the section is serving as chairman of this affair and has been successful in obtaining Dr. W. R. G. Baker, vice president of General Electric Co., and general manager of its elec-

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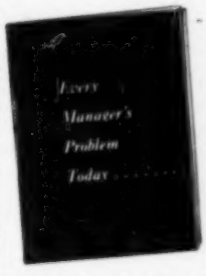

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tronics division, to be the speaker of the evening. Dr. Baker's topic will be "Color television."

BIRMINGHAM On Mar. 18 William B. Dunlap, chief chemist, Monsanto Chemical Co., Anniston, Ala., will talk on "Plant standards." Mr. Dunlap has a B.S. in both education and chemical engineering, supplemented by two years' graduate work in organic chemistry at Louisiana State University. Since 1940, he has been connected with the Monsanto Chemical Co. in chemical analysis and research duties, having participated in the research design phase of rocket propellants. Mr. Dunlap is a member of the Anniston Industrial Management Assoc., Alpha Chi Sigma Fraternity, and the Anniston Chamber of Commerce.

BUZZARDS BAY Shaw Goldthwaite of Collyer Insulated Wire Co. of Pawtucket, R. I., will discuss "Quality control at Collyer" at the Mar. 13 meeting to be held at the Continental Screw Co.

CHICAGO On Feb. 22 at the next "do-it-yourself" meeting another actual problem will be presented to the audience for analyzing and solution. The previous meeting proved to be helpful to those having similar problems in their plant. If you have a problem in QC see the "do-it-yourself" committee at their next meeting, which will be held at 7 pm at the Navy Pier, University of Illinois Extension Building.

Our program chairman has announced that at the next general meeting of the section to be held on Mar. 14, E. H. Robinson of Johnson & Johnson, surgical dressing company, will address the membership. The title of his talk will be "Marketing tarketing."

CINCINNATI The regularly scheduled meeting for February will not be held as it would occur during the week set aside for National Engineers' Week held each year at this time. We will instead attend the Technical Scientific Societies Council meeting on the evening of Feb. 22.

The next meeting date will be Mar. 14 when Irvin F. Taylor of North American Aviation, Inc. will be the guest speaker. His topic will be "Discovery sampling."

CLEVELAND The March meeting will be held on Friday the 2nd at the Cleveland Engineering Society. Dinner at 6:30 pm will precede the meeting which will feature Charles A. Bicking of the research development division, Office of Chief of Ordnance, Washington, D. C. His topic will be "Selection of most efficient experimental design." This meeting will be called "chairman's night" since all of our past chairmen will be invited to dinner that evening.

The section is planning to hold a seminar to discuss statistical techniques for two hours before each meeting. The tentative topics are tests of significance, regression analysis, and analysis of variance.

DELAWARE An afternoon tour of the local Chrysler plant will be the main feature of the next meeting to be held on Mar. 1. A discussion of the statistical quality control methods used at this plant has been arranged by Ted Crommer, section treasurer.

The educational clinic which usually precedes the regular monthly meetings will not be held on Mar. 1 because of the Chrysler plant tour. The next educational clinic session will be on Apr. 5.

DAYTON On Mar. 10 the section will undertake its first all-day conference. As of this writing, several top notch speakers have been obtained. The conference committee is now completing final arrangements and from all indications this conference should be of interest to practically everyone as the program is directed towards several different technical groups.

ERIE Mar. 6 will find us holding a joint session with the local chapter of the American Institute of Industrial Engineers. Speaker of the evening will be H. S. Enrick, quality control manager of electronics division, Erie Resistor Corp. Mr. Herrick's topic has been announced as "A proposed quality incentive plan."

GEORGIA "Digital computers in quality control" will be presented by C. Ralph Partington, applied science representative, International Business Machines, Atlanta, on Tuesday, Feb. 28 in Room 1833, Hurt Building.

The spring program has been mailed listing the meetings on the last Tuesday of each month through May.

HARRISBURG The regular monthly meeting to be held Mar. 7 will feature Dr. Ellis R. Ott as a speaker. Dr. Ott will have for his topic "Narrow limit gaging." This meeting will be held at the Indian Echo Hotel, Hummelstown, and promises to be a truly outstanding meeting.

INDIANAPOLIS The next section meeting will be held on Feb. 21. The afternoon session features George W. McDermott, Delco-Remy Div., GMC, and will be held at the War Memorial. The evening session, to be held at the Indianapolis State Board of Health Bldg., will feature Robert Brickley of Westinghouse.

INDIANAPOLIS Columbus Subsection On Mar. 8, the group will meet at International Harvester. The guest of the evening will be J. Barnbee. This will be a meeting you won't want to miss.

KANSAS CITY The section's March meeting will be on Wednesday, the 14th, at the Blue Hills Restaurant. Following the dinner at 7 pm, a business meeting will precede the program featuring the speaker, Arthur Bender, Jr. Mr. Bender, national president of the society, is associated with the Delco-Remy Div., General Motors Corp., Anderson, Ind. He will tell of activities in the national organization in addition to his presentation of a technical subject.

LOUISVILLE All of us who have taken control concepts from our "ivory towers" into the plant are aware that problems arise. Therefore the topic of J. Fredrick Verigan, who is to speak at our March meeting, has universal appeal. His topic will be "Interesting plant personnel in quality control." Mr. Verigan has been statistical quality control manager for Atlas Power Co. since 1950 and is a Fellow in the society. The meeting will be held Mar. 12 at 8 pm in the Seagrams Auditorium.

The section, through its education committee, has arranged for the presentation of fifteen minute educational capsules before the principal speaker. These short talks are to be given by members of the local section and are to present the need, method, and results for a specific quality control problem that they have encoun-

tered. The schedule of capsule talks for the remainder of the year is: Jim Holloway of Ford Motors, Mar. 12; Bob Mayes of Schenley, Apr. 9 and May 14.

MICHIGAN The Mar. 16 meeting, to be held at the Rackham Building, Detroit, is listed as management night and is co-sponsored by the Detroit chapter of the American Chemical Society and the American Society for the Advancement of Management.

"Quality control and it's relationship to sales" will be the subject of an address by Donald L. Gibb, manager of plastics sales for the Dow Chemical Co., Midland. Mr. Gibb's talents as a speaker are widely known and his subject should be of interest to both those involved in quality control as well as those in sales work.

MICHIGAN Wolverine Subsection A meeting is scheduled for Mar. 1 at the Harris Hotel in Kalamazoo. Edward E. Stephenson, staff technician of the Sutherland Paper Co., will discuss "Techniques of inspection in the paper industry."

MID-HUDSON The March dinner meeting of the section will be held on the 6th at Nick Beni's Anchor Inn, Poughkeepsie, N. Y. Dinner will be served at 7 pm with the meeting scheduled to start at 8 pm.

MILWAUKEE On Feb. 20 the section has the distinct privilege of hearing Dr. M. E. Mundel, vice director of the Marquette University management center, speak on "Administrative applications of quality control." Those who heard his keynote address at the 10th Midwest conference will agree that this meeting will be an important one.

MINNESOTA Visual inspection problems will be covered by Armond Stoefen and Art Cunnien of the Toni Company at the Feb. 21 meeting. The Toni Co. has done a lot to develop visual standards and the meeting should be of special interest to those with like problems.

MONTREAL The regular monthly meeting will be held on Feb. 22. This month a dinner will be included. Our speaker will be E. E. Sorensen of the British American Oil Co., Ltd., Toronto, and his talk will cover "Statistical methods in activity areas of production yields and costs as they relate to forward planning and follow-up control."

MUNCIE Brent C. Jacob, Jr., chief industrial engineer, Chrysler Division, Detroit, Mich., will speak before the section on the topic "Machine tool capability" at 7:30 pm Mar. 15.

NEW HAVEN On Mar. 13 the feature of the evening will be a lecture by Jack Silver of the U. S. Census Bureau. Mr. Silver's subject will be "The application of statistical quality control to office operations." This topic is one that should prove interesting to all involved in industry.

NORTHEASTERN INDIANA John Harrington, chief engineer, gaging department, DoAll Gage Co., Des Plaines, Ill., will speak on the subject of "Technique of surface grinding" at the Mar. 8 meeting to be held at the Chamber of Commerce, Fort Wayne, at 8 pm.

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PHILADELPHIA Warren Purcell of Rath & Strong will discuss "QC in the paper industry" at our Mar. 16 meeting to be held at Franklin Institute.

RHODE ISLAND For our Mar. 15 meeting we will have Dorian Shainin of Rath & Strong, Boston, Mass., speak on "Controlling the quality of management's decisions."

SEATTLE The section in conjunction with the Seattle chapters of the AIIE, ASM, ASME, and the ASTE will hold a joint dinner meeting at the Student Union Building on the campus of the University of Washington on Mar. 7. The program will be the DoAll travelling exhibit "Civilization through tools."

SOUTHERN CONNECTICUT The Mar. 14 meeting will be held at Pitney-Bowes, Inc., Stanford. The speaker will be W. A. MacCrehan, quality control engineer, Bendix Radio Div., Bendix Aviation Corp., Baltimore, Md. His topic will be evaluating vendor quality. Mr. MacCrehan will tell what the leading aircraft companies are doing to determine reliability of products. To further illustrate his talk, 23 slides in color will be shown. The section is looking forward to the talk and our first visit to Pitney-Bowes. Joseph Lewis, quality control manager, will be our host for this visit.

SOUTH TEXAS W. N. Smith of the Dow Chemical Co. at Freeport, will be the principal speaker at the Mar. 14 meeting. Mr. Smith's subject, "Propagation of error as applied to cost estimates," illustrates clearly that SQC techniques are not restricted to the field of manufactured products only. The training session, preceding Mr. Smith's talk, will be conducted by O. L. Nordin of Thornhill-Craver who has chosen as his subject, "Linear correlation."

TORONTO The Niagara Peninsula group of the section has two meeting and lecture sessions scheduled. The first to be held on Mar. 5 will be an introduction to sampling procedure. The second on sampling plans is slated for Mar. 19.

On Mar. 10 the Toronto section will hold an all-day forum in Hart House at the University of Toronto.

WICHITA Paul Leatherman will be the principal speaker when the section meets on Mar. 6. Mr. Leatherman will address the group on "Application of quality control in the brewing industry." D. E. Hillman, program chairman, will conduct a question and answer session following Mr. Leatherman's address.

WINNEBAGO The March meeting of the section will be held at the Elk's Club in Appleton, Wis. Plans will be made for making the last meeting of the year a ladies night affair.

The training sessions for the balance of the year will be taken up by the explanation and significance of the "T" test.

WORCESTER Dale L. Lobsinger, supt. of quality control, United Airlines, Inc., Denver, Colo., will be the speaker at the Mar. 15 meeting. His subject will be "SQC applied to administrative areas."

YOUNGSTOWN At the next section meeting, W. J. Youden from the National Bureau of Standards in Washington, D. C., will address the group at a dinner meeting in the VFW Hall. His subject will be "Design and analysis of experiments."

"AS YE SOW . . ."

BINGHAMTON The Binghamton and Utica sections will hold a joint one-day clinic on quality control in Utica, N. Y. on Mar. 13. There will be four guest speakers and one moderator. Panel discussions will take place following each talk. Either section may be contacted for reservations.

BIRMINGHAM A spring training course in industrial quality control will be sponsored by the section. The teacher and five lecturers are all ASQC members. They are: T. W. Young; Neil H. Zimmerman; C. M. McClendon; James E. Mitchell, Jr.; Edwin Phelps; and Miss Mary B. Rumsey, teacher.

BUFFALO Feb. 22 should be a red letter day for the section for on that date our part of the Technical Societies Forum will be Dr. M. A. Brumbaugh giving a talk on the "Evaluation of Statistical Methods as a tool for management."

PURDUE UNIVERSITY EXTENSION COURSE Purdue University Extension in Hammond, Ind. will offer two advanced quality control courses on Tuesday evenings. Prof. Nicholas Relich, Calumet sub-group chairman, will teach both courses. Further information regarding the starting date, tuition, etc., can be obtained by contacting Professor Relich or the University Extension in Hammond.

DALLAS -FORT WORTH A one-day quality control seminar will be held on Mar. 2; location pending. Dr. A. W. Wortham, Chance-Vought Aircraft, Inc., Prof. H. P. Goode, Southern Methodist University, and Dr; John L. Wortham, Texas Christian University, are in charge of arrangements.

PITTSFIELD On Mar. 1 the section will sponsor an all-day educational clinic at the Stanley Club in Pittsfield. John Hinchen of Monsanto Chemical Co. in Springfield, and J. Arthur Zoellner of General Electric Co. in Schenectady, will be moderators for the clinic which is entitled "Design of experiments." Since both moderators are experienced speakers in this field, the membership is looking forward to the clinic with considerable interest.

FOURTH PACIFIC NORTHWEST QC CONFERENCE The fourth annual Pacific Northwest quality control conference sponsored by the Seattle section, will be held Mar. 9-10 at the Student Union Building on the campus of the University of Washington. The Friday session will cover elementary training in the philosophy and techniques of statistical quality control. The Saturday program will feature talks by prominent Northwest authorities on the subject of quality control citing their particular problems and the programs they developed to utilize the advantages of statistical quality control. Inquiries regarding the conference may be made by writing to: Robert Y. Handa, 311 Dewey Place, Seattle 2, Wash.

UNIVERSITY OF OKLAHOMA JULY 9-20 The extension division of the University of Oklahoma at Norman, Okla., is planning a ten-day course in statistics in July. The course has been tentatively set for July 9-20, and will be an advanced course with special emphasis on statistical techniques, analysis of variance, design of experiment, correlation, etc., as used in process industries. It is primarily aimed at chemical engineers and technologists in the oil refineries and chemical industries of the West, Southwest, and Southeast. M. L. Powers, director of the business and industrial services, and Dr. R. L. Huntington, research professor of the college of engineering, school of chemical engineering of the University of Oklahoma, were in Houston on Dec. 22 to get suggestions from the South Texas section leaders. To present the South Texas section's ideas were Jerrold H. Moyer, chairman; Ed Aldrege, vice chairman; Bill Sevier, past chairman; and Charles Shewell, Midwest region director and chemical division councillor for the 14th district.

TORONTO The section announces its third annual all-day forum on quality control to be held on Mar. 10 in Hart House at the University of Toronto. The program will include: an all-day non-technical session on fundamental principles of SQC by J. C. Knapp of Ford Motors (Canada) Ltd.; six speakers prominent in the field of industrial quality control; a panel session and case histories with Dr. J. H. Toulouse, vice president of ASQC and chief engineer, quality and specification, Owens-Illinois Glass, acting as moderator. J. H. Goss, president, Canadian General Electric, will preside at the banquet.

WESTERN MASSACHUSETTS Arrangements with the Massachusetts University Extension are being completed for a basic course in statistical quality control to start early in March.

On either Feb. 29 or Mar. 7 an all-day clinic on sampling will be conducted. Mason Wescott has agreed to be one of the leaders.

CORNELL UNIVERSITY FELLOWSHIP The department of industrial and engineering administration of the Sibley School of Mechanical Engineering at Cornell University announces a graduate fellowship in the area of experimental statistics, sponsored by the Standard Oil Company of Ohio. This fellowship carries a stipend of $2,250 for the academic year and is to be used to support work toward either the M.S. or Ph.D. degree.

Applicants are expected to have suitable undergraduate preparation in some branch of engineering or in the physical sciences, but undergraduate training in statistics is not a prerequisite. The holder of the fellowship will be expected to take courses in both applied and mathematical statistics selected from among the offerings of the members of the Cornell Statistics Center.

Interested persons who desire additional information concerning this fellowship may write to Professor Robert E. Bechhofer, Cornell Statistics Center. Application forms for this fellowship and for admission to the graduate school may be obtained from the Graduate School, 125 Edmund Ezra Day Hall, Cornell University, Ithaca, N. Y., and should be filed not later than Feb. 17 for April 1 award. Late applications will be considered only if an award has not been made by Apr. 1.

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"FOR MANY ARE CALLED, BUT FEW ARE . . ."

MID-HUDSON Paul Heitz was appointed by the section's executive committee to fill the unexpired term of vice chairman James Lockhart who has resigned and moved to California to accept a position with the University of Southern California. Paul is quality control manager of the International Business Machines Corp., Kingston, N. Y.

SIGNIFICANT DIFFERENCES

George I. Craycraft, Milwaukee section vice chairman, has been assigned the position of purchasing director by the Midland Co., South Milwaukee, Wis., with whom he has served so ably as quality control manager. We are proud of George and extend our best wishes for his success.

Nelson Meagley, a member of the Toledo section, is now employed by the Lincoln Division of the Ford Motor Co. Mr. Meagley was formerly quality control manager of Willys-Overland in Toledo. Mr. Meagley's transfer is quite a loss to the Toledo section in view of his past history of propagating the SQC concept to section members as well as Toledo industry in general.

Congratulations to C. K. Donoho of the Birmingham section who has been promoted to the position of assistant technical director and chief metallurgist of the American Cast Iron Pipe Co., one of the country's leading pipe manufacturers.

Paul L. Sternenberg, quality control supervisor of Johnson & Johnson and Dallas - Fort Worth section treasurer, has been transferred to the Chicago office of Johnson & Johnson.

The following promotions of Delaware section members have recently been announced at the International Latex Corp., Dover. Loren Steinhauer to manager of receiving inspection; Francis Holden to manager of product inspection; and Edward Dworkin to general supervisor of product inspection. Hearty congratulations of the section are extended to these members.

Harold C. Harsh, production manager of the Ansco division of the General Aniline & Film Corp., has been named to the newly created position of manager of operations. Mr. Harsch is a member of the Binghamton section.

Announcement of the appointment of Irwin F. Holland to be special assistant to the manager of the cutting tool and gage divisions of the Pratt & Whitney Co. has been made by A. H. d'Arcambal, company president. Mr. Holland, Hartford section, has been prominent in the cutting tool industry for over 45 years and has held many important posts with the Pratt & Whitney organization.

Paul K. Leatherman of the St. Louis section has recently left the Falstaff Brewing Corp. Until further notice, Mr. Leatherman can be reached at his home address, 6052 Pernod Ave., St. Louis 9, Mo.

The Aircraft Division and the Wichita section note with deepest regret the death of one of their members, Mr. Leslie Cox. Mr. Cox was an inspector at the Cessna Aircraft Co., Pawnee Road Plant, in the sheet metal fabrication department for the past year. Prior to that time, he spent more than twenty years with the Coleman Lamp Co. as inspector.

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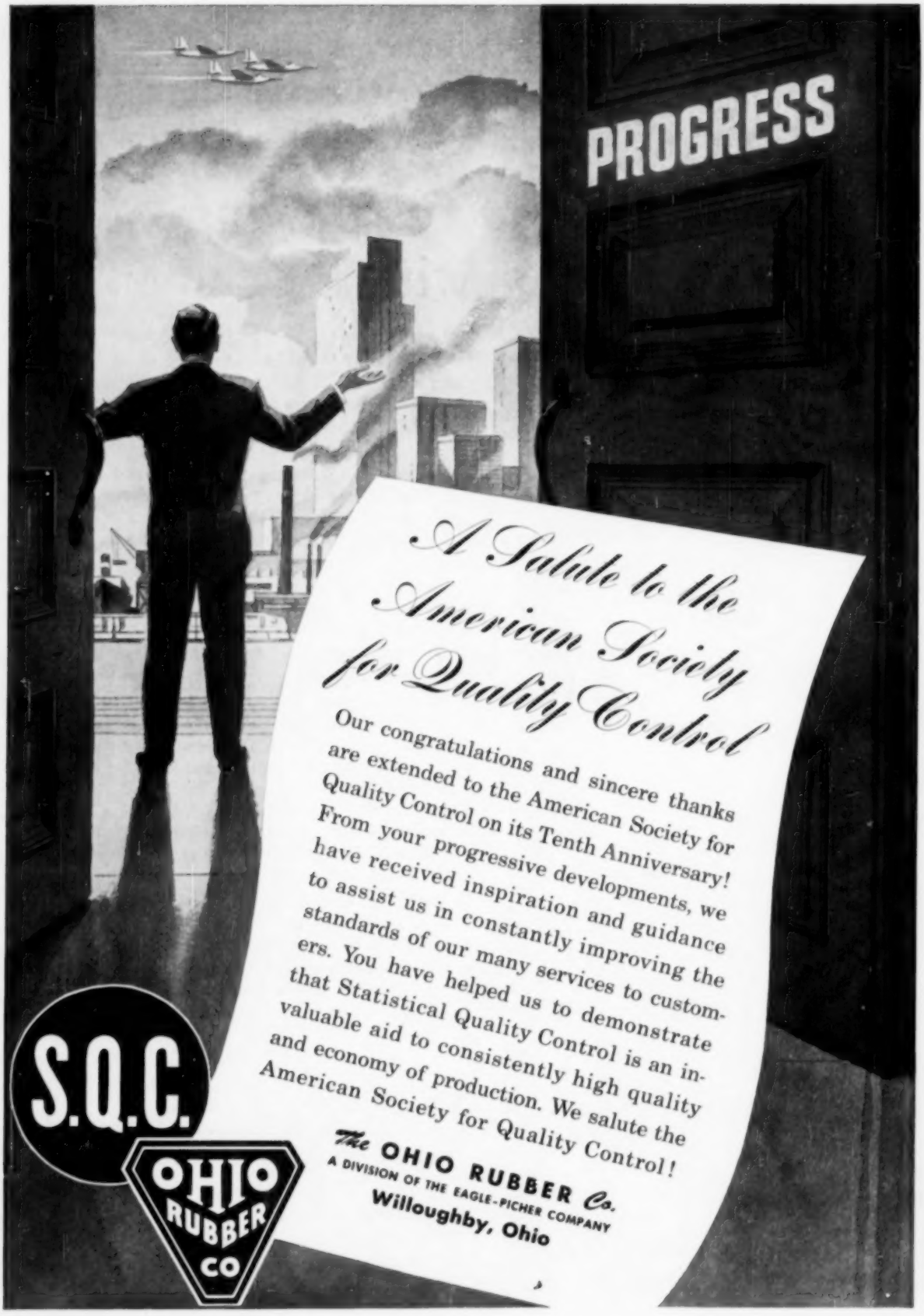

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